

Environmental Monitoring Report

Semestral Report
July–December 2020
April 2021

Uzbekistan: Djizzak Sanitation System Development Project

Prepared by the Project Coordination Unit for Communal Services Agency “Kommunhizmat” of the Republic of Uzbekistan for the Asian Development Bank.

This environmental monitoring report is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

ABBREVIATIONS

ADB	Asian Development Bank
DSSDP	Djizak Sanitation System Development Project
CSA	Agency “Kommunhizmat”
EA	Executing agency
EHS	Environmental, Health and Safety
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EMR	Environmental Monitoring Report
ESC	Environmental Specialist of Consultant
Goscomecology	Uzbek National Environmental Management Agency
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
IEE	Initial Environmental Examination
km	kilometer
MHCS	Ministry of Housing and Communal Services of the Republic of Uzbekistan
NCN	Non-Conformance Notice
PCP	Public Communications Policy
PDC	Project Development Consultant
PCU	Project coordination unit
SIAK	Goscomecology water quality lab in Djizak
SPS	Safeguard Policy Statement
SSEMP	Site Specific Environmental Management Plan
Suvokova	Now - Djizzak Suv Taminoti LLC - Water Supply & Sewerage services Company, Project Employer
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

Contents

1	INTRODUCTION	4
1.1	Preamble	4
1.2	Headline Information.....	4
2	PROJECT DESCRIPTION AND CURRENT ACTIVITIES	5
2.1	Project Description.....	5
2.1.1	Civil works under Component 1 - Construction of a new wastewater treatment plant (WWTP)	7
2.1.2	Civil works under Component 2 - Rehabilitation of 4 pumping stations, and construction of sewage collector mains and networks	7
2.2	Project Contracts and Management.....	8
2.3	Project Activities During Current Reporting Period	10
2.4	Description of Any Changes to Project Design.....	11
2.3	Description of Any Changes to Agreed Construction Methods.....	11
3	ENVIRONMENTAL SAFEGUARD ACTIVITIES	12
3.1	General Description of Environmental Safeguard Activities.....	12
3.2	Site Inspections	12
3.3	Issues Tracking (Based on Non-Conformance Notices).....	13
3.4	Trends	17
3.5	Unanticipated Environmental Impacts or Risks	17
4	RESULTS OF ENVIRONMENTAL MONITORING	18
4.1.	Overview of Monitoring Conducted during Current Period.....	18
4.2.	Air Quality	18
4.3.	Noise and vibration	20
4.4.	Waste Management.....	20
4.5.	Health and Safety	21
4.5.1.	Community Health and Safety.....	21
4.5.2.	Workers Health and Safety	22
4.6.	Soil Contamination.....	24
4.7.	Grievance Redress Mechanism	24
4.8.	Trends	25
4.9.	Summary of Monitoring Outcomes	25
4.10.	Material Resources Utilization.....	37
4.11.	Training	37
5.	FUNCTIONING OF THE SEMP	38
5.1.	SEMP Review	38
6.	GOOD PRACTICE AND OPPORTUNITY FOR IMPROVEMENT	39
6.1.	Good Practice	39
6.2.	Opportunities for Improvement.....	39
7.	SUMMARY AND RECOMMENDATIONS	40
ANNEX:	ENVIRONMENTAL MANAGEMENT PLAN	42

1 INTRODUCTION

1.1 Preamble

1. This report represents the Semi - Annual Environmental Monitoring Report (SAEMR) for Djizak Sanitation System Development Project (DSSDP).
2. This report is the 8th EMR for the project.

1.2 Headline Information

3. The civil works under the Djizak Sanitation System Development Project divided into four Subprojects and one additional subproject (expansion):
 - 1) Contract DS-WW-01 - Design & Build Contract "Construction of new WWTP in Djizak"
 - 2) Contract DS-WW-02 Zone A - "Rehabilitation and Construction of 28, 86 km of sewerage collectors and 2 pumping stations"
 - 3) Contract DS-WW-03 Zone B - "Rehabilitation and Construction of 14.21 km of sewerage collectors"
 - 4) Contract DS-WW-04 Zone C - "Construction of 18.29 km of sewerage collectors and 1 pumping station"
 - 5) Contract DS-WW-05 - Design & Build Contract "Construction and rehabilitation of 53.5 km of sewer networks, as well as cleaning of 9.5 km of the existing sewer networks".
4. The International Competitive Biddings (ICB) for the selection of three Construction Contractors and two Design & Build Contractor are completed.
 - Contract DS-WW-01 – 10 May 2019
 - Contract DS-WW-02 Zone A – 14 December 2018
 - Contract DS-WW-03 Zone B – 14 December 2018
 - Contract DS-WW-04 Zone C – 14 December 2018
 - Contract DS-WW-05 – 16 October 2020.
5. Three contracts approved in early 2019 by ADB for sewer collectors and pump stations have become effective and works commenced in March 2019.
6. The Design & Build Contract DS-WW-01 "Construction of new WWTP" has been approved by ADB and become effective in June 2019. Works commenced in January 2020.
7. The second Design & Build Contract DS-WW-05 for Additional scope of works the tendering process is completed and the contract signed on 5 November 2020.

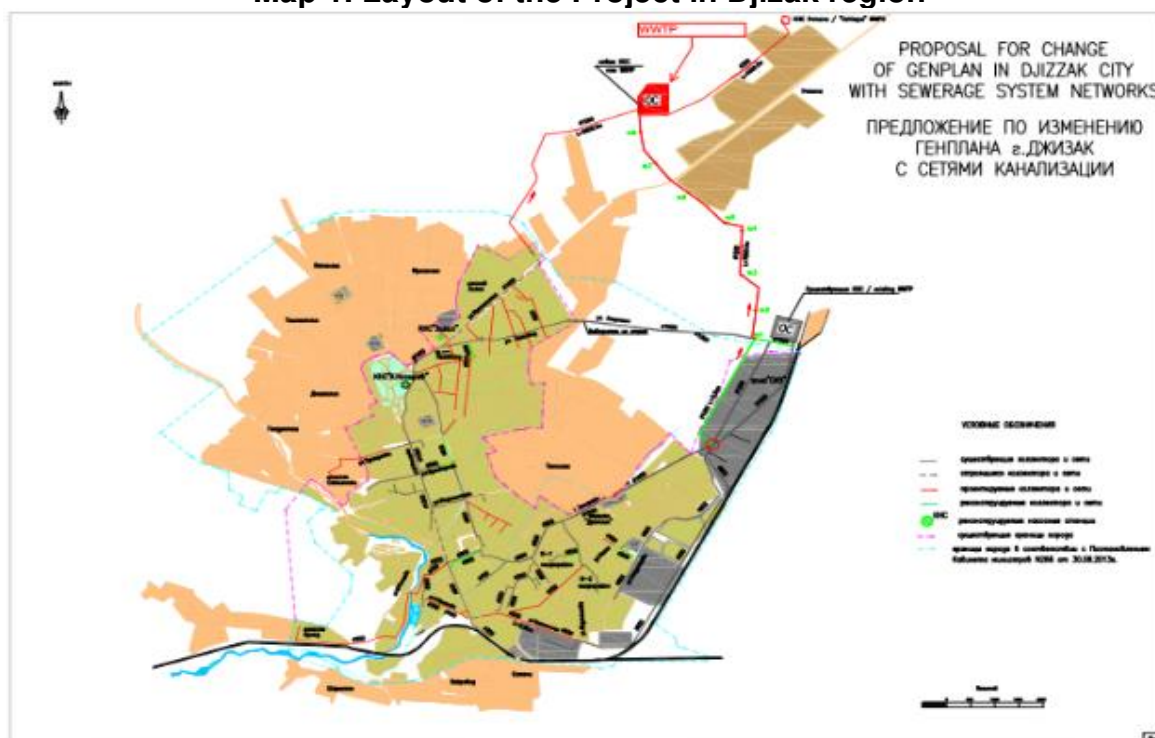
2 PROJECT DESCRIPTION AND CURRENT ACTIVITIES

2.1 Project Description

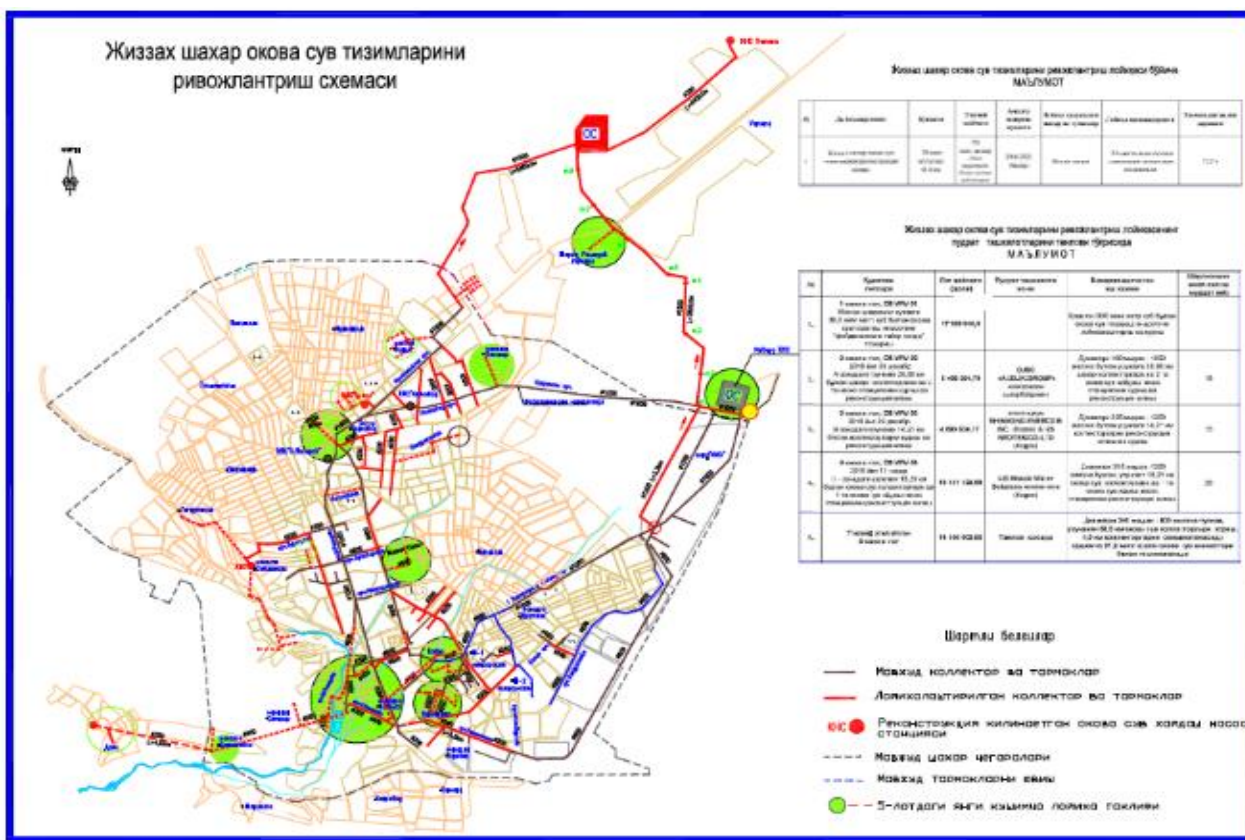
8. The project is located in Djizak city and Uchtepa District Center of Sh. Rashidov District (former Djizak district).
9. The Djizak Sanitation System Development Project (DSSDP) consists of the following two main components:
 - **Component 1:** the construction of a new wastewater treatment plant (WWTP)
 - **Component 2:** the rehabilitation of three pumping stations Zilol, Nosirov and Uchtepa, and construction of 62 km of sewage collector mains and networks.
 - **Expansion:** construction and rehabilitation of 53.5 km of sewerage network as well as, cleaning of 9.5 km of existing sewerage network.
10. The impact of the project will be improved living standards, environment, and public health in Djizak. The outcome of the project will be improved and expanded access to reliable, sustainable, and affordable water supply and sanitation services of Djizak.
11. The project is classified as category B for the environment under ADB's Safeguard Policy Statement (2009). Project implementation period is: 2016-2021.
12. At the initial stage of the DSSDP, the Project Initial Environmental Examination (IEE) was prepared for Initial Project under the ADB's TA Program and was approved by ADB in August 2014. After Project approval, according to the updated feasibility study, the location of WWTP was changed. For this reason, in 2016-2017 according to the ADB instructions the initial IEE has been divided into two IEEs: (i) IEE for construction and rehabilitation of sewer trunks, networks and pumping stations and (ii) IEE for construction of new WWTP.
13. The IEE for construction and rehabilitation of sewer trunks, networks and pumping stations was updated in March 2017 and the IEE for construction of new WWTP was updated in April 2017.
14. In early 2019 the Executing Agency (EA) requested ADB and Government to use the loan savings via including additional construction services into the scope of the existing Project. Proposed additional works include construction of approximately 53.5 km sewerage networks and cleaning of 9.5 km existing sewerage networks in Djizak city. After reached agreements, ADB advised the EA to updated IEE for sewer networks before starting any activities under the proposed additional civil works. In July 2019, the updated IEE submitted to ADB, have been approved by ADB and disclosed.
15. In 2020 the project Employer - Djizak Suv Taminoti (former Suvokova) has requested to make changes to the design of Contract DS-WW-02. The Employer has cancelled some sections of works from the ongoing Contract due to wide changes in the city master plan, and instead of cancelled works proposed to add new works without changes of contract amount. The new works consist of - construction of additional 6.212 km sewer networks and rehabilitation of 1 pumping station. According to these changes, PCU started to update the IEE for sewer trunks, networks, and pumping stations, received several comments from ADB. In time of preparation of this SAEMR the IEE is in updating stage.

16. The new WWTP is being constructed 5 km away from Djizak city and is located on the border with Uchtepa town with the site size of 28 ha. The WWTP would discharge its treated sewer into the Sovruksoy Canal, which will connect to Ulkursoy Sewer Canal. Sovruksoy Canal passes through open field, and pasture lands, until it intersects with Ulkursoy Canal and to major drainage canal (Kly), eventually ending in Aydar Lake (Aydarkul).
17. The public consultations were carried out regularly starting the project start up stage.
18. During this reporting period due to quarantine conditions the public consultation carried out individually. In September 2020, the individual meetings with residents living in the areas of new works were conducted.
19. According to updated feasibility study, the existing old WWTP will not be demolished. It is out of this project and this WWTP is on the Djizak Suvokova responsibility.
20. The revised project feasibility study has been completed and issued the "expert's opinion" by official authorities of Uzbekistan. The additional President Resolution #3885 "On additional measures for the implementation of Djizak Sanitation System Development Project" was issued on July 27, 2018.
21. The Djizak branch of the State Committee for Environmental Protection issued the positive conclusion for the revised "Environmental impact statement".
22. The design documents for the construction of sewers, networks and pumping stations developed by design firm "Royal Dizayn Loyiha" LLC. For the construction of new WWTP the design documents are being developed by the subcontractor "Suvokova Hizmat" under the design & build contract.
23. Location of the pumps, networks and WWTP to be constructed and rehabilitation under the Project are highlighted in the map below:

Map 1. Layout of the Project in Djizak region



Map 2. Construction of 53.5 km additional networks and cleaning of 9.5 km sewers



2.1.1 Civil works under Component 1 - Construction of a new wastewater treatment plant (WWTP)

24. The Design & Build Contract has been awarded in June 2019. Now the design and construction activities are ongoing in parallel.

2.1.2 Civil works under Component 2 - Rehabilitation of 4 pumping stations, and construction of sewage collector mains and networks

25. Following three Contractors selected and signed contracts for construction and rehabilitation of sewerage collectors, networks, and pumping stations:

- 1) Contract DS-WW-02 Zone A - "Rehabilitation and Construction of 28.86 km of sewerage collectors and 2 pumping stations"
- 2) Contract DS-WW-03 Zone B - "Rehabilitation and Construction of 14.21 km of sewerage collectors"
- 3) Contract DS-WW-04 Zone C - "Construction of 18.29 km of sewerage collectors and 1 pumping station"

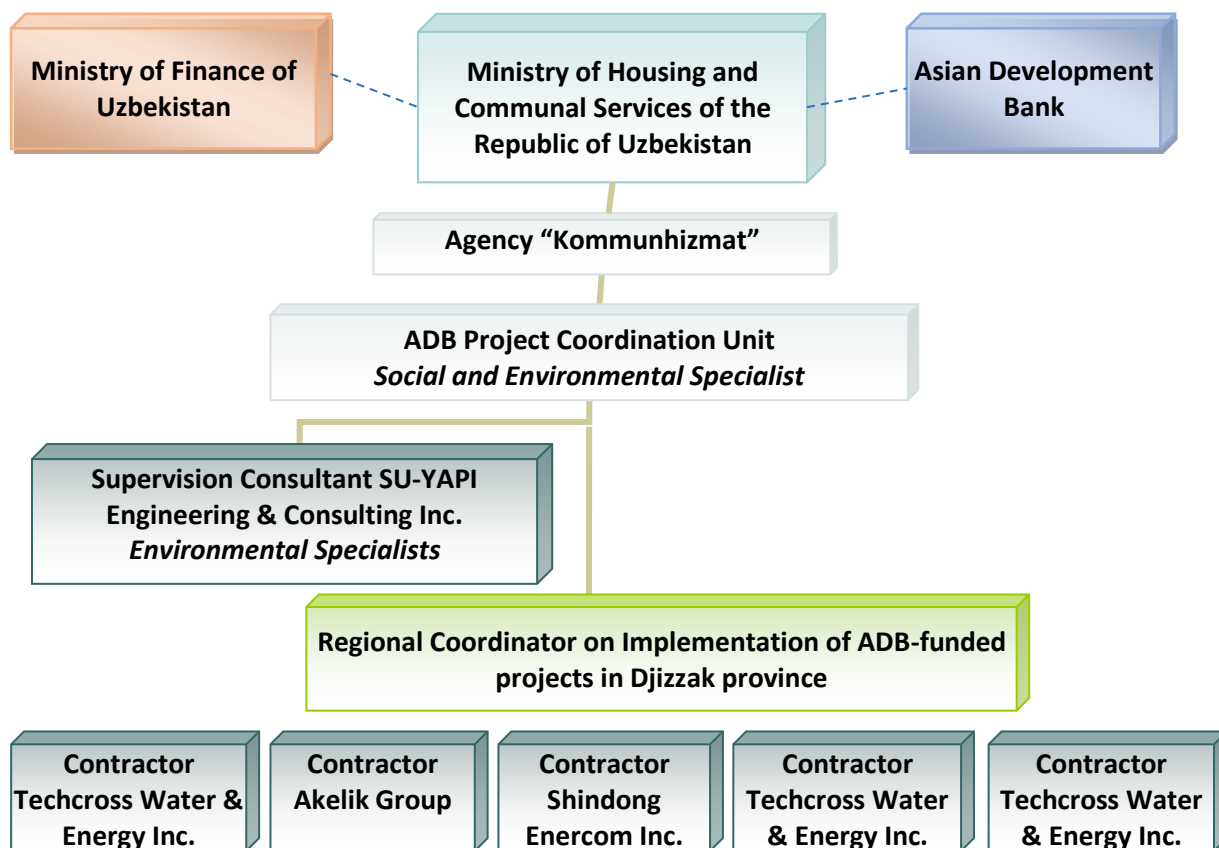
26. Contracts approved by ADB, have become effective and works commenced in February 2019.

27. The Design & Build Contract package for additional works – Construction and rehabilitation of 53.5 km of sewage networks and cleaning of additional 9.5 km of existing sewage networks – is also completed and contract signed on 4 November 2020. The Contractor started the design works only.

2.2 Project Contracts and Management

28. The organizational structure of the project team is presented in Figure 1 below.

Figure 1: Institutional Chart of the Environmental Safeguards Performance



29. The Agency "Kommunhizmat" (CSA) is an integral part of Ministry of Housing and Communal Services of the Republic of Uzbekistan, the project proponent and executing agency, is implementing the Djizak Sanitation System Development Project (DSSDP) in order to address urgent national wastewater treatment problems.
30. Environmental Protection specialists of PCU and PDC will closely monitor the compliance with all safeguard requirements during the implementation of the DSSDP.
31. The PCU and PDC specialists updated the IEEs and conducted public consultations.
32. The Contract for Project Development Consulting Services with SU-YAPI Engineering & Consulting Inc. (Turkey) was signed on 2 August 2016. The consultants mobilized for the Kick-off Meeting on 31 October 2016 for the Project. TOR for supervision consultants contains tasks for national and international environment specialists to update IEE and monitor the EMP implementation. The consultants conduct

environmental monitoring of the project progress and submit semi-annual Environmental Monitoring Report to PCU.

33. In the team of Consultant, there are one International and one National Environmental Specialists. The National Environmental Specialist worked since contract start-up period was resigned in early 2019. From June 2019, new Environmental Specialist Mr. Akmal Begimkulov started his activities under the project. However, his official approval by ADB was 23 October 2019.
34. The Contractors have appointed the Environmental Specialists, who ensure all environmental safeguards, health and safety requirements are met on sites, and who has to submit monthly monitoring reports and checklists to the Consultant's Environmental Specialist.

Table 1: Responsible Executives for Environmental Safeguards

Asian Development Bank	<ul style="list-style-type: none"> - Environment Specialist, CWOD-PSG - <i>Kyoko Uematsu</i> - Associate Safeguards Officer, URM - <i>Feruza Insavaliyeva</i> - RETA International Environmental Consultant – <i>Keti Dgebuadze</i> 	kuematsu@adb.org finsavaliyeva@adb.org kdgebuadze.consultant@adb.org ketdgeb@yahoo.com
Executing Agency – PCU of Kommunhizmat Agency	<ul style="list-style-type: none"> - Director – <i>Sherzod Gulomov</i> - Environmental Specialist - <i>Sayyora Tillyakhodjaeva</i> - Regional Coordinator - <i>Sobir Abdusattorov</i> 	adbpcuucsa@gmail.com sayyora.tillyakhodjaeva@gmail.com
Implementing Agency - Djizzak Suv taminoti LLC	<ul style="list-style-type: none"> - Director - <i>Zokir Mamarasulov</i> 	jizzak_suvogova@inbox.uz
Supervision Consultant – Su-Yapi Engineering & Consulting (Turkey)	<ul style="list-style-type: none"> - Team Leader - <i>Lutfu Kaynar</i> - International Environmental Specialist – <i>Gunal Ozenirler</i> - National Environmental Specialist – <i>Akmal Begimkulov</i> - 1-Supervision Specialist for Zone A – Mr. Ismat Tursunov - 2-Supervision Specialist for Zone B – Mr. Bakhtiyor Nurmatov - 3-Supervision Specialist for Zone C – Mr. Rakhim Izbasarov - 4-Supervision Specialist for WWTP – Mr. Furkat Uralov 	lutfu.kaynar@suyapi.com.tr ozenirler.gunal@2u1k.com.tr akmal-begimkulov@mail.ru suyapi.djizak@mail.ru
Contractors 1) Techcross Water & Energy Inc. (renamed	<ul style="list-style-type: none"> - Management – <i>Mr. Woo Seung Kook</i> 	seungkook.woo@lge.com tel. +99894 617 11 68 shindong777@mail.ru

LG-Hitachi Water Solutions)	- Executive Subcontractor – Mr. Kim Jung Koon	tel. +99891 566 31 29
2) Akelik Group (Azerbaijan)	- Environmental Specialist – Mr. Ilkhom Safarov	
3) Shindong Enercom Inc. (Korea)	- Management – Mr. Zaur Ibragimov - Engineer & Environmental Specialist – Mr. Mirhashim Miryahyaev	zibrahimov@hotmail.com tel. +99897 400 26 01 miryahyayev@gmail.com tel. +99893 309 00 33
4) Techcross Water & Energy Inc. (renamed LG-Hitachi Water Solu.)	- Management – Mr. Kim Jung Koon - Environmental Specialist – Mr. Ilkhom Safarov	kims78@mail.ru tel. +99897 726 63 15 shindong777@mail.ru tel. +99891 566 31 29
5) Techcross Water & Energy Inc.	- Management – Mr. Woo Seung Kook - Environmental Specialist – Mr. Ilkhom Safarov	seungkook.woo@lge.com tel. +99894 617 11 68 shindong777@mail.ru tel. +99891 566 31 29
	- Management – Mr. Woo Seung Kook - Environmental Specialist – Mr. Ilkhom Safarov	seungkook.woo@lge.com tel. +99894 617 11 68 shindong777@mail.ru tel. +99891 566 31 29

2.3 Project Activities During Current Reporting Period

35. All contractors keep working on construction and rehabilitation of sewer collectors, networks, pumping stations and WWTP. The PDC is carrying out supervision in order to monitor the on-going construction works in terms of compliance with the EMP, and to monitor the commitments of the contractors within their SEMP. The Non-Compliances were issued by PDC, and the contractors completed most of these non-compliances. The progress of construction works is given in the Table 2 below.

Table 2. Summary of Civil Works Contracts and works' progress

Contract	Contractor	Signed	Civil Work Ends		Completed scope of work
			as per contract	actual	
DS-WW-01 Design & Build "Construction of WWTP"	Techcross Water & Energy Inc. (renamed LG-Hitachi Water Solutions)	30.05.2019	15.12.2020	being extended until 4.10.2021	39,35%
DS-WW-02 Construction of pump stations and sewerage networks	Akelik Group	29.12.2018	22.08.2020	5.12.2020	99%
DS-WW-03 Construction of sewerage collectors and networks	Shindong Enercom	29.12.2018	05.05.2020	5.12.2020	99%
DS-WW-04 Construction of pump	Techcross Water & Energy Inc.	11.01.2019	03.10.2020	being extended	79,04%

station and sewerage collectors				until 17.09.2021	
DS-WW-05 Design & Build "Construction of sewer networks and cleaning of existing sewer networks"	Techcross Water & Energy Inc.	20.10.2020	14.03.2022		0% - detailed design is in process

2.4 Description of Any Changes to Project Design

36. In 2020 the project Employer - Djizak Suv Taminoti (former Suvokova) has requested to make changes to the design of Contract DS-WW-02. The Employer has cancelled some sections of works from the ongoing Contract due to wide changes in the city master plan, and theses cancelled sections are not need. Instead of cancelled works the Employer proposed to add new works without changes of contract amount. The new works consist of - construction of additional 6.212 km sewer networks and rehabilitation of 1 pumping station. According to these changes, PCU started to update the IEE for sewer trunks, networks and pumping stations and received several comments from ADB. In time of this SAEMR preparation the IEE is in updating stage.

2.3 Description of Any Changes to Agreed Construction Methods

37. There were not any changes in construction methods.

3 ENVIRONMENTAL SAFEGUARD ACTIVITIES

3.1 General Description of Environmental Safeguard Activities

38. There are five contracts awarded under this project, out of which the construction works are ongoing under four contracts.
39. The Contractor 1 - Techcross Water & Energy Inc. for the WWTP Design & Build contract hired an Environmental Specialist officially. SSEMP prepared by the Environmental specialist of Contractor-1, reviewed and endorsed by RETA International Environmental Consultant, and officially approved by PCU on 13 April 2020.
40. The Contractor 2 - Akelik Group for construction of sewer networks and pump stations fixed with liability of EHS specialist to the Project Engineer. The Contractor's SSEMP has been approved on 12 August 2019.
41. The Contractor 3 - Shindong Enercom for construction of sewer trunks, networks and pump stations hired an Environmental Specialist officially. SSEMP prepared by the Environmental specialist of Contractor-3, reviewed and endorsed by RETA International Environmental Consultant, and officially approved by PCU on 28 May 2019.
42. The Contractor 4 - Techcross Water & Energy Inc. for construction of sewer trunks hired an Environmental Specialist officially. SSEMP prepared by the Environmental specialist of Contractor-3, reviewed and endorsed by RETA International Environmental Consultant, and officially approved by PCU on 24 May 2019.
43. The Contractor 5 - Techcross Water & Energy Inc. for Design & Build contract of 53.5 km of sewage networks and cleaning of additional 9.5 km of existing sewage networks, started only detailed design works.

3.2 Site Inspections

44. The list of conducted site audits is presented in Table 3 below.

Table 3: Site Visits

Date of visit	Auditor's Name	Purpose of Audit	Contract	Reference to Audit Report
20.08.2020	Akmal Begimkulov	Health, Safety and Environmental Compliance Review	DS-WW-01, Techcross Water & Energy Inc.	Site visit reports with non-compliances and recommendations
29.09.2020				
30.10.2020				
26.11.2020				
16.12.2020				
28.08.2020	Akmal Begimkulov	Health, Safety and Environmental Compliance Review	DS-WW-02, Akelik Group	Site visit reports with non-compliances and recommendations
25.09.2020				
27.10.2020	Akmal Begimkulov	Health, Safety and Environmental Compliance Review	DS-WW-04, Techcross Water & Energy Inc.	Site visit reports with non-compliances and recommendations
24.11.2020				
22.12.2020				
02.09.2020	Sayyora Tillyakhodjaeva	Project EHS audit for IEE update		Verbal non-compliance notices to contractors

45. In addition to the above visits, the Management of the PDC, the PCU and the Executing Agency also carried out regular visits to construction sites.

3.3 Issues Tracking (Based on Non-Conformance Notices)

46. The Table 4 below reflects the issues tracking during the reporting period.

Table 4. Copy of Issues Track Book

No.	Site/ Location	Date of registration	Problem Description	No NCN	Due date	Respon sible party	Status	Closing date	Note
Issues opened in the previous reporting period (January - June 2020)									
1	Akelik Group	11.10.2019	Portable toilets and shower cabins should be provided for the sites	NCN	for immediate action	Contractor	Closed	November 2020	It was continued issue, that sometimes closed accordingly, sometimes opened again. On sites the Contractor installed temporary toilets and closed the opened issue. However, the contractor worked at several sites, and accordingly on temporary sites they had not every time conditions for installation of mobile toilets. During this reporting period the Contractor completed the works on all sites.
2	Akelik Group	18.03.2020 20.05.2020 23.06.2020	Workers not completely provided with PPE	NCN 621/10-3/20-04 NCN 621/10-3/20-08	for immediate action	Contractor	Closed	November 2020	During this reporting period the Contractor completed the works on all sites.
3			The installed warning signs and tapes are not enough, when installed do not meet the requirements, in some sites are not available			Contractor	Closed	November 2020	During this reporting period the Contractor completed the works on all sites
4			In some sites the site passport and safety instructions' panels are not placed			Contractor	Closed	November 2020	During this reporting period the Contractor completed the works on all sites
5			Drinking water, first aid kits and medicines should be supplied to all sites in sufficient amount			Contractor	Closed	November 2020	During this reporting period the Contractor completed the works on all sites
6	Akelik Group	23.06.2020	Workers allowed in site without medical mask. Masks stock is not available on site.	NCN 621/10-3/20-11	for immediate action	Contractor	Closed	November 2020	During this reporting period the Contractor completed the works on all sites
7			Improper storage of pipes along the road.			Contractor	Closed	November 2020	During this reporting period the Contractor completed the works on all sites and cleaned sites.
8			On the audited site no warning signs and tapes are installed and			Contractor	Closed	November 2020	During this reporting period the Contractor completed the works on all sites and cleaned sites.

No.	Site/ Location	Date of registration	Problem Description	No NCN	Due date	Responsible party	Status	Closing date	Note
			not limited the access of community.						
9	Shindong Enercom	26.06.2020	In the audited site (pipeline construction d-1200mm in the territory of FIZ) the portable toilet is not available	NCN 621/10-1/20-11	for immediate action	Contractor	Closed	November 2020	On sites the Contractor installed temporary toilets and closed the opened issue. During this reporting period the Contractor completed the works on all sites and cleaned sites.
Issues recorded in July – December 2020									
10	Shindong Enercom	10.07.2020	Workers are not fully provided with PPE	NCN 621/10-1/20-11	for immediate action	Contractor	Closed	October 2020	The Contractor took corrective measures during the works. This reporting period the Contractor completed all works under the contract, cleaned and improved the sites. Some minor parts of asphaltting and greening works not yet completed due to cold weather conditions.
11			Lack of medicine masks for working staff				Closed		
12			Violation of oil products storage rules				Closed		
13			No safety measures taken fencing tapes, warning signs				Closed		
14			Not enough ladders for workers to work in the deep trenches, fencing tapes should also be installed				Closed		
15			It is recommended to address bad housekeeping				Closed		
16			Rules for storing petroleum products are being breached				Closed		
17			Violation of the rules for excavated ground dumping				Closed		
18	Akelik Group	25.09.2020	Workers are not fully equipped with PPE	NCN 621/10-3/20-16	5 days	Contractor	Closed	November 2020	Contractor not replied to the NCN. However, it was the last site of works. During this reporting period the Contractor completed the works on all sites. Some minor parts of asphaltting and greening works not yet completed due to cold weather conditions.
19			Not installed crossings over the trenches				Closed		
20			There are no fencing tapes and warning signs				Closed		
21			Violation of the rules for dumping soil, install shield supports in deep trenches				Closed		
22	Techcross Water –	20.08.2020	Some workers are not provided with PPE		5 days	Contractor	Closed		Workers fully provided with PPE

No.	Site/ Location	Date of registration	Problem Description	No NCN	Due date	Responsible party	Status	Closing date	Note
23	WWTP site		Serious violation of safety rules when using electricity on site	NCN 621/10-4/20-71		Contractor	Closed	8 September 2020	Bare electrical wires are insulated
24			Violation of quarantine requirements (mask, gloves, etc.)			Contractor	Closed		The contractor provided masks and gloves to workers.
25			Violation of the rules for the storage and use of bitumen.			Contractor	Closed		The ground cleaned, contaminated soil removed and used for construction works.
26	Techcross Water – WWTP site	16.12.2020	Workers of one Subcontractor are not provided with PPE.	NCN 621/10-4/20-101	5 days	Contractor	Open		Subcontractor ignores the requirements of general contractor's EHS specialist. The subcontractor's workers were not fully provided with PPE. Correction measures are expected to be implemented on 10 January 2021.
27			Violation of the rules for the storage and use of bitumen.			Contractor	Partially closed		This issue was raised several times during the works with bitumen. After the ESC's NCN they address the non-compliance, clean the contaminated soil, however the Subcontractors' workers always violate the rules of bitumen storage and use.
28			Tape around the high buildings for safe movement of workers.			Contractor	Open		Correction measures are expected to be implemented on 10 January 2021.
29	Techcross Water – sewer laying site	22.12.2020	Some workers do not use PPE.	NCN 621/10-2/20-23	5 days	Contractor	Open		Contractor supplied PPE to all workers, however some workers do not use it properly. EHS specialist required to instruct all workers to use PPE.

Table 5. Summary of issues tracking activity for the current period

Total Number of Issues for Project	29
Number of Open Issues	3
Number of Closed Issues	25
Number of Partially Closed Issues	1
Percentage Closed	86%
Issues Opened This Reporting Period	20
Issues Closed This Reporting Period	25

3.4 Trends

47. During this reporting period there were no expired issues (Table 4). Nine opened issues from the previous reporting periods as indicated in the table are closed.
48. The non-compliances mostly related to the health and safety, and are occurred mainly on new construction sites, and Contractors' being required regularly to improve the H&S conditions.

3.5 Unanticipated Environmental Impacts or Risks

49. No any unanticipated impacts identified during the reporting period.

4 RESULTS OF ENVIRONMENTAL MONITORING

4.1. Overview of Monitoring Conducted during Current Period

50. During the reporting period work were ongoing under 4 construction contracts. ESC carried out audit to ensure environmental compliance of construction works on sites. The main non-conformance issues noted and recorded during the site inspection are related health and safety.
51. During the current reporting period the following indicators have been monitored:
- Air quality
 - Noise and vibration
 - Waste Management
 - Health and safety
 - Soil Contamination

4.2. Air Quality

52. The Contractors Shindong Enercom and Techcross Water & Energy for measurements of noise and vibration have awarded contract with the Djizak Sanitary-Epidemiological Control Center, and for air analyses (emissions from vehicles) awarded contract with Djizak Nature Protection Committee. However, during this reporting period their working sites were located on farmlands and they did not work close to the residential areas, the air, noise and vibration measurements not provided by Contractors. Only according to the type of vehicles they calculated the emissions from construction site.

Table 6: Total emissions from construction site

Items	For sewers' construction		For WWTP construction	
	g/sec	tons/ month	g/sec	tons/ month
Inorganic dust (Неорганическая пыль)	0.52	0.361	0.82	0.57
Carbonic oxide (Окись углерода)	2.28	1.58	7.93	5.48
Carbon hydrate (Углеводороды)	0.69	0.47	2.38	1.64
Nitrogen dioxide (Двуокись азота)	0.91	0.63	3.17	2.19
Carbon black (сажа)	0.35	0.24	1.23	0.85
Sulfur dioxide (Диоксид серы)	0.46	0.32	1.59	1.10
Benzopyrene (Бнз(а)пирен)	0.000007	0.00001	0.00003	0.00002
TOTAL	5.21	3.60	17.12	11.83

53. According to measurement results, the emissions do not exceed the quota. The measurement made by the software "Ecologist" that calculates the dispersion of atmospheric pollutant emissions.

Table 7. List of Pollutants

Pollutants	MPC or approximate safe level, mg/m ³	Class of hazard	The established quota in shares of MPC	Maximum concentration in shares of MPC	Compliance with the established quota (+/-)	Emission Contribution Percentage	Total Air Emissions, g/sec	Total Air Emissions, tons/month
1	2	3	4	5	6	7	8	9
sewers' construction								
Inorganic dust	0,5	3	0,33	0,08	-0,25	10,04	0,52	0,361
Carbonic oxide	5,0	4	0,5	0,11	-0,39	43,84	2,28	1,58
Carbon hydrate	1,0	4	0,5	0,08	-0,42	13,15	0,69	0,47
Nitrogen dioxide	0,085	2	0,25	0,07	-0,18	17,54	0,91	0,63
Carbon black	0,15	3	0,33	0,03	-0,30	6,80	0,35	0,24
Sulfur dioxide	0,5	3	0,33	0,08	-0,25	8,77	0,46	0,32
Benzopyrene	0,1mkg 100m ³	1	0,2	0,00001	-0,2	0,00014	0,000007	0,00001
TOTAL							5,21	3,60
WWTP construction								
Inorganic dust	0,5	3	0,33	0,10	-0,23	4,8	0,82	0,57
Carbonic oxide	5,0	4	0,5	0,31	-0,19	46,3	7,93	5,48
Carbon hydrate	1,0	4	0,5	0,15	-0,35	13,9	2,38	1,64
Nitrogen dioxide	0,085	2	0,25	0,14	-0,11	18,5	3,17	2,19
Carbon black	0,15	3	0,33	0,06	-0,24	7,2	1,23	0,85
Sulfur dioxide	0,5	3	0,33	0,14	-0,19	9,3	1,59	1,10
Benzopyrene	0,1mkg 100m ³	1	0,2	0,00002	-0,2	0,0002	0,00003	0,00002
TOTAL							17,12	11,83

54. The excessive dust generation was not observed during the reporting period, because, in summertime due to quarantine restrictions the works were suspended, in autumn and winter times due to rainy and snowy weather. The Contractors Shindong Enercom and Techcross Water&Energy not worked in residential areas during this reporting period. The Contractor Akelik Group cleaned and washed the streets after trenches backfilled (Figures 2 and 3).



Figures 2 - 3 – cleaning and washing the streets - site of Contractor Akelik Group

4.3. Noise and vibration

55. For sewers laying works the Contractors Shindong Enercom and Techcross Water & Energy not worked in residential areas during this reporting period, and therefore they did not provide the noise and vibration measurements. As well as the WWTP site is located about 600-700 m away from any residential and commercial structures.
56. During the works in residential areas the Contractor Akelik Group do not use the heavy machinery, instead they use low noise and vibration generating construction machinery like manual compactors and excavation devices to avoid exceeded noise and vibration. The Contractor limited works between the hours of 19:00 and 07:00. Since, during the reporting period, no complaints received from nearby population, the CCs did not provide measurements.

4.4. Waste Management

57. All contractors have agreements for waste disposal. They have prepared waste management plans, and they implement it during the works. The table below shows the waste volume generated by contractors during reporting period. The Contractor Techcross Water & Energy updated the agreement with “Toza Hudud” SUE, for other Contractors do not need update, because they completed the works.

Table 8. Volume of waste generated and disposed for the reporting period

Type of waste	Total
Solid waste	6.46
Construction waste (brick, concrete pieces, cement, destroyed asphalt pieces, PE pipe pieces)	14.2
Fuels and oils	
Wood	10.0
Iron/steel	3.9
Paint/plaster	

Type of waste	Total
Mercury lamps	
Battery	
Total	34.56 tons
<i>Including:</i>	
<i>reused</i>	<i>10.0</i>
<i>waste processing</i>	<i>4.12</i>
<i>to landfill</i>	<i>19.61</i>

58. The waste mainly being generated during site preparation and asphalt roads destroying, however destroyed asphalt pieces are being reused for compaction and as filling materials of the foundation ditches.

4.5. Health and Safety

4.5.1. Community Health and Safety

59. According to the project design, the permanent sites have to be fenced with reinforced concrete panels or iron bar fences. On all pump station sites and on WWTP site, the installation of fencing panels has been completed.



Figures 4 - 5 – pump station site fencing - site of Contractor Akelik Group



Figure 6 – site fencing – pump station site of Contractor Techcross Water & Energy



Figure 7 – site fencing – WWTP site of Contractor Techcross Water & Energy

- 60. Mainly in all sites the information boards are available, except some temporary sites in non-residential areas.
- 61. All Contractors ensure the availability of GRM, incidents/accidents and near misses' log books and keeps them on site.
- 62. Before starting of works the Contractors carried out meeting with mahalla chairman and residents to inform about construction schedule and forthcoming temporary impacts.
- 63. During the works on roads the Contractors use the warning signs and tapes.



Figures 8 - 9 – warning signs and tapes installed - site of Contractor Akelik Group

4.5.2. Workers Health and Safety

- 64. The Contractors regularly have been notified by the Consultant about the pandemic conditions and to strictly comply with sanitary requirements to prevent the spread of COVID-19.
- 65. The Environmental Specialist of Consultant regularly informed Contractors' workers and representatives on site about the condition in the country and COVID-19 disease, required them to comply strictly with quarantine measures. Workers were required to wear masks, regularly change the masks and their body temperature was under control.

66. Due to the COVID-19 pandemic, the sanitary and hygienic measures have been introduced at site of WWTP, such as organization of a sanitary checkpoint to disinfect vehicles and people entering the construction site, checking the temperature of everybody at the entry to the site, workers are provided with masks with periodic replacement, check the temperature of workers every day in the morning before starting the work, regularly provide disinfection inside the buildings and in working places etc.
67. The Contractors' safety engineers regularly have instructed all workers based on the "National Sanitary rules & measures No.0372-20 on "Restrictions to be followed during COVID-19 pandemic conditions by state authorities and other organizations, as well as temporary sanitation rules and measures related to organizing entrepreneur activities" issued on April 23, 2020. It was required and monitored by the state Agency for Sanitary and Epidemiological Welfare.



Figure 10–COVID-19 preventive measures – site of contractor Techcross Water

68. On permanent sites the Contractors placed the mobile toilets and showers for workers during the hot weather time.



Figures 11-12– toilets and showers - sites of Contractors Techcross Water and Akelik

69. On all sites the first aid kits, incidents/accidents and near misses' logbooks are available.

4.6. Soil Contamination

70. During the works with bitumen were detected some non-compliances on permanent sites (WWTP and pump station) of the Contractors Akelik Group and Techcross Water. After the PCU Environmental specialist's instructions, the relevant corrective measures were taken by Contractors and the ground cleaned from bitumen.

Before -



Figures 13-14—bitumen heating - sites of Contractors Techcross Water and Akelik

After -



Figures 15-16 – cleaned sites of Contractors Techcross Water and Akelik

4.7. Grievance Redress Mechanism

71. The complains logbook is established on all sites. Prior to start the works on sites the Contractors conduct meetings with the Mahalla committee to explain scheduled construction activities, and to inform about construction activities and anticipated impacts.

4.8. Trends

72. Community and workers' health and safety issues, and community consultations, are continued challenges, but need to be improved through continuous instructions and trainings for workers by Contractors' EHS specialists and under the guidance of EHS specialist of supervision consultant.

4.9. Summary of Monitoring Outcomes

73. Status of compliance with environmental safeguards related covenants in the Project's Loan Agreement signed between Republic of Uzbekistan and ADB on 12 November 2015¹ is summarized in Table 9.

Table 9. Loan Agreement Compliance Status

Schedule	Paragraph	Covenant	Compliance Status
5	10	<p><u>Environment</u></p> <p>The Borrower shall ensure, or cause CSA to ensure, that the preparation, design, construction, implementation, operation and decommissioning of the project and all Project facilities comply with (a) all applicable laws and regulations of the Borrower relating to environment, health and safety; (b) the Environmental Safeguards; and (c) all measures, and requirements set forth in the IEE and the EMP, and any corrective or preventative actions set forth in a Safeguards Monitoring Report.</p>	<p><u>Complied</u></p> <p>According to national regulations the Project shall not be commenced if the Feasibility Study is not approved by all project related State Authorities, including Ministry of Justice, Ministry of Construction, Ministry of Health, Ministry of Employment and Labor Relations, State Committee on Ecology and Environmental, etc. All these authorities review the consistence of project with all related regulations and approve the FS, or issue their comments/notes prior to issuance the President Resolution to the project Implementation. The Djizzak Province Department of the State Committee on Ecology and Environmental protection issued the positive certificate to the environmental impact statement of the Project in September 2017. All measures and requirements set forth in the IEE and EMP, and all corrective or preventative actions are being presented in the Semi-annual Environmental Monitoring Reports.</p>
5	11	<p>Without limiting the generality of the foregoing paragraph, the Borrower shall ensure, or cause CSA to ensure, that only industrial customers whose industrial discharge meets the effluent standards under applicable environmental law (as confirmed by issuance of a certificate from the</p>	<p><u>Complied</u></p> <p>As of September 2020 there are 27 industrial enterprises in Djizzak city and 13 of them have local treatment system. The Djizzak Suv Taminoti LLC and Djizzak Nature protection Committee provide monthly monitoring of waste waters' quality from industrial enterprises.</p>

¹ ADB. Loan Agreement (Special Operations) for Loan 3275-UZB: Djizzak Sanitation System Development Project (12 November 2015). <https://www.adb.org/sites/default/files/project-document/176852/46135-002-sfj.pdf>

Schedule	Paragraph	Covenant	Compliance Status
		National Projection Committee) shall be connected to the project facilities.	
5	15	<p><u>Human Resources to Implement Safeguards Requirement</u></p> <p>The Borrower shall make available or cause CSA to make available necessary human resources to fully implement the EMP and the LARP.</p>	<p><u>Complied</u></p> <p>To the PCU of CSA are hired one Environmental Specialist and one Social Specialist. The Environmental Specialist is responsible for EHS part of all CSA implementing ADB funded projects. The PCU hired Project PMC team has a National Environmental Specialist with EHS compliance responsibility.</p>
5	16	<p><u>Safeguards – Related Provisions in Bidding Documents and Works Contracts</u></p> <p>The Borrower shall ensure, or cause CSA to ensure, that all bidding documents and contracts for Works contain provisions that require contractors to:</p> <p>(a) comply with the measures relevant to the contractor set forth in the IEE, EMP and the LARP (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set forth in a Safeguards Monitoring Report;</p> <p>(b) make available a budget for all such environmental and social measures;</p> <p>(c) provide the Borrower with a written notice of any unanticipated environmental, resettlement or indigenous peoples risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the IEE, the EMP and the LARP;</p> <p>(d) adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and</p>	<p><u>Complied</u></p> <p>(a) The IEE and EMP are the integral parts of all bidding documents and Works' contracts, and included as annexes to the contracts. Accordingly, the IEE and EMP requirements shall be unconditional fulfilled by the contractors. All corrective or preventative actions are being presented in the Semi-annual Environmental Monitoring Reports.</p> <p>(b) The Contractors' budgets partially include the IEE required measures and preventative actions. In spite of that the contractors should follow the requirements according to national regulations.</p> <p>(c) The Borrower will be informed in case of any unanticipated impacts arise. Since without Borrower's decision the project may not be continued.</p> <p>(d) Prior to commence the work the Contractor obtains the permissions from the State Committee for Roads under the Ministry of Transport, with initial screening of road inspectors. For agricultural lands and other infrastructures, the district/city governors issue</p>

Schedule	Paragraph	Covenant	Compliance Status
		(e) reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.	the decision with the permission of land users or landowners. (e) All permissions are issued only with the condition of reinstatement after completion of works.
5	17	<p><u>Safeguards Monitoring and Reporting</u></p> <p>The Borrower shall do the following, or cause CSA to do the following:</p> <p>(a) submit quarterly Safeguards Monitoring Reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission;</p> <p>(b) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the IEE, the EMP and the LARP, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan; and</p> <p>(c) no later than the commencement of land acquisition and resettlement activities, engage a qualified and experienced independent expert or qualified non-governmental organization under a selection process and terms of reference</p>	<p><u>Not Complied</u> – in spite of the fact that the Loan Agreement requires submission of the quarterly safeguard monitoring reports, according to IEE the PCU submits the semi-annual reports, as well as it was agreed during the ADB safeguard missions. Starting 2021 the quarterly environmental monitoring reports will be submitted to ADB. After disclosed on ADB website, the EMRs we translate them into Russian and disclose on website of Executing Agency. Until end of 2020 we disclosed our reports on website of the Ministry of Housing and Communal services.² Starting 2021 we will post them on the website of JSC Uzsvtaminot, due to liquidation of Kommunhizmat Agency and transferred the duties of EA to JSC Uzsvtaminot.</p> <p><u>Complied</u> – No unanticipated environmental risks and impacts are identified.</p> <p><u>Complied</u></p>

² Links of some reports posted on MHCS website: <https://mjko.uz/views.php?view=NTQ4%20&sub=Mzc=>
<https://mjko.uz/views.php?view=NTUw%20&sub=MzQ=>

Schedule	Paragraph	Covenant	Compliance Status
		<p>acceptable to ADB, to verify information produced through the Project monitoring process, and facilitate the carrying out of any verification activities by such external experts; and</p> <p>(d) report any actual or potential breach of compliance with the measures and requirements set forth in the EMP or the LARP promptly after becoming aware of the breach.</p>	<u>Complied.</u>
5	18	<p><u>Prohibited List of Investments</u></p> <p>The Borrower shall ensure, or cause CSA to ensure that no proceeds of the Loan are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the SPS.</p>	<u>Complied</u> – No proceeds of the Loan are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the SPS.
5	19	<p><u>Labor and Health Standards</u></p> <p>The Borrower shall, and shall cause CSA to ensure that the Works contracts for the Project incorporate provisions to the effect that the contractors shall: (a) comply with applicable core labor standard and labor laws, and incorporate applicable workforce occupational safety norms; (b) provide equal pay to men and women for the same type of work and enabling working conditions for female workers; (c) not employ child labor; (d) abstain from compulsory labor; (e) abstain from employment discrimination; (f) allow for freedom of association; (g) go to the extent possible, maximize employment of local poor and disadvantaged persons for project construction purposes, provided that the requirement for job and efficiency are adequately met; and (h) provide safe working conditions.</p>	<u>Complied</u> – The project is being implemented following the core labor standards and the applicable laws and regulations. Relevant provisions are included in the bidding documents and work contracts.
5	20	The Borrower shall, and shall cause CSA to ensure that the Works contracts for the Project disseminate information (in local language) on the risks of sexually transmitted diseases, including HIV/AIDs, in health and safety program for all	<u>Complied</u> – the information disseminated through public consultations, meetings with local residents near the work sites. Relevant provisions are included in the bidding documents and work contracts.

Schedule	Paragraph	Covenant	Compliance Status
		construction works at campsites. The Borrower shall, and shall cause CSA to ensure that specific provisions to this effect shall be included in the bidding Documents and Works contracts for the Project, and the Borrower shall ensure that compliance shall be strictly monitored by CSA.	

74. Status of compliance with the Project EMP attached to the disclosed updated IEE of 2017 is summarized in Tables 10 and 11.

Table 10. Implementation Status of EMP during the pre-construction period

Impact/Issue	Required Mitigation Measures	Compliance Attained					Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
		DS-WW-01	DS-WW-02	DS-WW-03	DS-WW-04	DS-WW-05		
1.1 Lack of any capacity to understand and implement environmental mitigation measures, and no training	• Design and deliver a training workshop on EMP implementation	yes	yes	yes	yes	yes		
1.2 No provision for translation of IEE and related documents for use by contractors	• CSA to ensure that translation into Uzbek or Russian is completed	yes	yes	yes	yes	yes		
1.3 Bid documents prepared without access to or use of the IEE and particularly this EMP	• Inclusion of environmental specifications in contract bid documents, based on EMP items, as well as preparation of a bill-of-quantities section specifically showing environmental safeguard costs	yes	yes	yes	yes	yes		
1.4 Contractor selected has no capacity to implement safeguards	• CSA to decide if contractor to be prequalified in the environmental safeguards area or a requirement for expertise, whether hired or internal must be demonstrated prior to start of construction	yes	yes	yes	yes	yes		
1.5 Pre-construction period monitoring checklist not submitted	• CSA advises PCU and PDC that such a checklist is needed	yes	yes	yes	yes	yes		
1.6 Failure to Initiate a traffic management plan, to handle traffic during sewer installations	• CSA to advise PCU and Djizzak "Suvokova" that a basic traffic management plan - at last framework must be prepared and be ready for use by the contractor	yes	yes	yes	yes	yes		
1.7 Failure to prepare specifications on how to manage temporary access blockages due to sewer pipe placement	• PCU and Djizzak "Suvokova" to establish the sequence for notification of work to come, doing the work and restoration of access to all households and businesses affected, such that this disruption is known ahead of time, is as short as possible and the re-established access is at least as good as prior to construction.	yes	yes	yes	yes	yes		
1.8 No tree inventory and cutting specifications	• Most collector sewers to be replaced or newly installed will be buried along road shoulders,	yes	yes	yes	yes	yes		

<i>Impact/Issue</i>	<i>Required Mitigation Measures</i>	<i>Compliance Attained</i>					<i>Comment on Reasons for Partial or Non-Compliance</i>	<i>Required Action and Target Dates to Achieve Compliance</i>
		<i>DS-WW-01</i>	<i>DS-WW-02</i>	<i>DS-WW-03</i>	<i>DS-WW-04</i>	<i>DS-WW-05</i>		
prepared for sewage line construction corridor	which have many mature trees. A tree inventory and cutting plan will be required in order to minimize to an absolute minimum the removal of trees, accompanied with a replanting plan, with input from local residents and district forest departments, concerning species, if the trees cut cannot be replaced with the same species							

Table 11. Implementation Status of EMP during the construction period

Impact/Issue	Required Mitigation Measures	Compliance Attained				Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
		DS-WW-01	DS-WW-02	DS-WW-03	DS-WW-04		
2.1 Excessive construction-period air pollution	Emissions will be kept to a minimum by:						
	1. Ensuring that the contractor's fleet of vehicles are properly maintained;	yes	yes	yes	yes		
	2. Use acceptable fuel and haul loads within specified limits;	yes	yes	yes	yes		
	3. Vehicle idling time limits to no more than 3 minutes;	yes	yes	yes	yes		
	4. Equipment maintenance specifications will be imposed through construction inspection and regular reporting;	yes	yes	yes	yes		
	5. Dust control at the construction site will be particularly stringently controlled by watering, setting strict speed limits of no more than 30 km/h in or near settled areas, and clean-up of paved haul roads;	yes	yes	yes	yes		
	6. Equipment such as the diesel generator will be included in the emission control program and will be and regularly tuned to prevent excessive TPM/soot pollution.	yes	yes	yes	yes		
2.2 Excessive noise	Identify sensitive sites like hospitals, retirement homes, sanatoriums and urban park areas, then reduce noisy activities such as jack hammers during low noise periods and if needed set up temporary noise baffles.	yes	yes	yes	yes		

Impact/Issue	Required Mitigation Measures	Compliance Attained				Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
		DS-WW-01	DS-WW-02	DS-WW-03	DS-WW-04		
2.3 Inadequate use of tree clearing, and replanting plan prepared during pre-construction period	Contractor to be handed the tree cutting and replanting plan at the start of construction and carefully monitored - Contractor must review, update with the PDC and Djizzak "Suvokova" then adhere to the plan. A system of severe fines, involving replanting of mature trees, for cutting and damaging trees outside the cutting areas, will be implemented. Any installations where there are mature roadside shade trees, designers will be contacted to realign the sewer into the road to avoid cutting.	yes	yes	yes	yes		
2.4. Poor Haul Road Maintenance	1. The contractor will need to inspect roads used for transport of earthworks every day, making sure that debris waste materials and earth has not fallen off the back of trucks generating safety concerns and dust; and that immediate clean up occur if problems are noted.	yes	yes	yes	yes		
	2. All such trucks will need to be equipped with covers or nets preventing spillage and reducing wind-blown dust from vehicles	yes	yes	yes	yes		
2.5 Inadequate traffic management when sewer construction taking place	Traffic management will be essential since most of the sewer placement work will be in the middle or on one side of existing roads, requiring an effective traffic management operation. To that end contractors will require either automated lights or two flagmen at each major work area to help keep traffic from backing up too badly.	yes	yes	yes	yes		
2.6 Failure to adhere to construction related good housekeeping practices, including solid and sanitary waste management	Contractors will adhere to standard good housekeeping practices as defined in the contract Terms & Conditions and Contract Specifications. Special considerations will be given to 1. management of construction waste and water;	yes	yes	yes	yes		

Impact/Issue	Required Mitigation Measures	Compliance Attained				Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
		DS-WW-01	DS-WW-02	DS-WW-03	DS-WW-04		
	2. equipment lubricants and fuel, including management and collection of waste oils and fuel particularly related to refuelling depots, maintenance areas and diesel generator sets Sewage will require latrines or chemical toilets with complete clean up after the construction is complete;	yes	yes	yes	yes		
	3. garbage will be collected and properly disposed of after recycling and sorting.	yes	yes	yes	yes		
	This work will be completed in accordance with RoU norms and codes which the contractor will be expected to know, based on the information found in the IEE. Also, the contractor shall orient all construction workers in basic sanitation and health care issues occurring in the Djizzak area.	yes	yes	yes	yes		
2.7 Inadequate occupational health and safety measures in the workplace	1. The contractor will provide PSE such as hardhats, boots noise protection, safety vests and eye protection where necessary, such as when welding, grinding or cutting;	yes	yes	yes	yes		
	2. Fencing or safety ribbon will be required at every worksite, marking the boundary for safe viewing;	yes	yes	yes	yes		
	3. Sanitary toilet, washing and eating facilities (if needed) will be provided;	yes	yes	yes	yes		
	4. Safe potable water supply will be available at all times and within easy reach of workers;	yes	yes	yes	yes		
	5. Industrial-grade first aid kits will be at every work site	yes	yes	yes	yes		
2.8 The lack of technical capacity with the contractor to implement and report on environmental safeguards, leading to the collapse of the	At the start of the construction period, but before field mobilization the PCU and PDC will deliver a short training workshop to the contractor as well as "Suvokova" staff, focusing on the EMP, the mitigation and monitoring tasks, responsibility to the public and proper documentation. Approximately 12-13 people	yes	yes	yes	yes		

Impact/Issue	Required Mitigation Measures	Compliance Attained				Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
		DS-WW-01	DS-WW-02	DS-WW-03	DS-WW-04		
environmental safeguards actions	will be involved, plus three people delivering the workshop.						
2.9 Failure to properly manage petroleum products such as fuel, lubricants, leading to spill and contamination.	Contractor will be required to have the following spill prevention measures in place at all work sites: 1. All fuelling to be done on a concrete surface provided with spill catch tank that can be cleaned, and all spilled fuel recovered and recycled based on discussions with fuel supplier.	yes	yes	yes	yes		
	2. All repair and maintenance work must either be done on a concrete surface with oil spill catch basin or oil catch pans must be provided at all service areas and training provided to all 'mechanics'.	yes	yes	yes	yes		
	3. All fuel use areas where spills and leakage are possible, e.g., the generator, must have drip basins installed to prevent any leakage. These recovered materials must be recycled.	yes	yes	yes	yes		
	4. A fuelling area must be equipped with proper fuel nozzles	n/a	n/a	n/a	n/a	All vehicles are rented. Repair, refueling of vehicles carried out by the leaseholder. Garage for maintenance and repair of equipment, fuel and lubricants warehouse is not available on construction sites.	
	5. All fuel tanks must have means for containment of accidental spills.	yes	yes	yes	yes		
	6. Any spills must be cleaned up according to RoU norms and codes within 24 hours of the occurrence, with contaminated soils and water treated according to RoU norms and codes.	yes	yes	yes	yes		
2.10 Contractor does not provide monthly monitoring updates or quarterly monitoring checklists or semi-	At start of construction period the contractor will be given and schedule for report submission and during the training period samples of the reports required will be presented.	yes	partially	yes	yes	After several requests, the Contractor Akelik Group submitted annual	In the reporting period July-December 2020 the contractor Akelik Group has completed the works under

Impact/Issue	Required Mitigation Measures	Compliance Attained				Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
		DS-WW-01	DS-WW-02	DS-WW-03	DS-WW-04		
annual summary reports or final construction period EMP implementation report						environmental monitoring report for the period February–December 2019 with long delay. Starting from 2020 they submitted monthly EMRs until August 2020 also with long delays.	contract. They required to submit the post-construction Environmental Audit report and Final EMR in February-March 2020.
2.11 Post sewer installation rehabilitation and landscaping	Immediately after the placement if a section of sewer the contractor must immediately rehabilitate and re-landscape the area to preconstruction conditions, including re-establish access.	yes	yes	yes	yes		
2.12 Pumping Station spill damage	All existing pumping stations have spilled untreated sewage in a large area around the pump site. As part of the repair and rehabilitation each site will be full cleaned up and re-landscaped in consultation with local residents.	yes	yes	yes	yes		
2.13. Industrial enterprises not complying with pretreatment requirements.	At the start of the final construction year, PDC and PCU will provide a detailed briefing to contractor on effluent pre-treatment requirements and the provisions of Resolution No.11 as it applies to the industries.	Partially				As of September 2020, there are 27 industrial enterprises in Djizzak city and 13 of them have local treatment system. The Djizzak Suv Taminoti LLC and Djizzak Nature Protection Committee provide monthly monitoring of waste waters' quality from industrial enterprises. Until the new WWTP is commissioned (end of 2021) all industrial enterprises which discharge the hazardous effluent will have local pre-treatment facilities. It is under The Djizzak Suv Taminoti LLC and Djizzak Nature protection Committee control.	

4.10. Material Resources Utilization

- 75. For use of electricity, the Contractors have the agreements, and they made payments according to tariffs. For the reporting period they consumed 83222 kWt electricity.
- 76. For construction needs they use water from nearby canals or drainage ditches along the roads. For drinking water also, they have agreements, and they made payments according to tariffs. For the reporting period they consumed 27360 m³ water.
- 77. 9.05 tons petrol and 221 tons diesel fuel used in the reporting period.

4.11. Training

- 78. During the reporting period Contractors' EHS specialists regularly conducted occupational health and safety inductions for workers and keep records on sites. The main issue of all Health and Safety instructions in this reporting period was COVID-19 issue.

4. FUNCTIONING OF THE SEMP

4.1. SEMP Review

79. Construction Contractors are responsible for implementing mitigation measures set out under the SEMP. After contract award and prior to commencing any physical works, Site-specific Environmental Management plans (SSEMPs) have been developed by all Contractors under the guidance of the PDC (Project Development Consultant) and approved by PCU.
80. Contractors' EHS specialists trained on ADB SPS and local EHS requirements. At present Contractors are implementing the mitigation and monitoring measures.
81. Currently SEMP with Topic SEMP for all contracts are effective, mitigation measures are appropriate, and they are working as intended. There is no need for changes.
82. The last Design-Build Contract DS-WW-05 is recently commenced. It is at designing stage. The draft SEMP will be submitted in April-May 2021, when the first part of design documents will be completed.
83. In accordance with the ADB requirements, in order to ensure safe and healthy working conditions for workers, and to minimize the adverse effects and risks to the health and safety of workers, local communities living near the project area from the Covid-19 infection, the Contractors developed Health and Safety Plan (HSP) and Emergency Response Plan (ERP) in October-November 2020 as per ADB request.

5. GOOD PRACTICE AND OPPORTUNITY FOR IMPROVEMENT

5.1. Good Practice

89. Based on the updated Feasibility Study the location of new WWTP have been changed and it will be constructed at 5 km away from Djizak city and located on the border with Uchtepa city with the site size of 28 ha.
90. Relocation of WWTP is motivated by following reasons:
- the proposed territory was occupied by private houses and construction of collectors will require demolition of about 40 houses;
 - the location is close to the village;
 - to avoid malfunction of the main pump station. Any accident at WWTP may cause wastewater flow into the residential area. This may spread a disease and pollution over the territory.
91. In 2019 the IEE for sewer mains, networks and pumping stations have been updated, approved and disclosed on ADB and EA websites, due to proposed additional scope of works - Construction and rehabilitation of 53.5 km sewer and cleaning of 9.5 km of existing sewer network.
92. In 2020 the project Employer - Djizak Suv Taminoti (former Suvokova) has requested to make changes to the design of Contract DS-WW-02. The Employer has cancelled some sections of works from the ongoing Contract due to wide changes in the city master plan, and instead of cancelled works proposed to add new works without changes of contract amount. The new works consist of - construction of additional 6.212 km sewer networks and rehabilitation of 1 pumping station. According to these changes, PCU started to update the IEE for sewer trunks, networks, and pumping stations, received several comments from ADB. In time of preparation of this SAEMR the IEE is in updating stage.

5.2. Opportunities for Improvement

93. Not identified.

6. SUMMARY AND RECOMMENDATIONS

6.1. Summary

94. This is the 8th semi-annual report under the Project. Contractors timely started implementing of construction works, monitoring and mitigation measures.

95. The issues identified during this monitoring period is summarized in Table 12.

**Table 12. Issues Identified and Not Closed During the Monitoring Period
(Jul – Dec 2020)**

Issue	Required Action	Responsibility	Timing (Target Dates)
Workers of one Subcontractor are not provided with PPE.	Subcontractor ignores the requirements of general contractor's EHS specialist. The subcontractor's workers were not fully provided with PPE. Correction measures expected on 10 January 2021.	Contractor	10 January 2021
Violation of the rules for the storage and use of bitumen.	This issue was raised several times during the works with bitumen. After the ESC's NCN they address the non-compliance, clean the contaminated soil, however the Subcontractors' workers always violate the rules of bitumen storage and use.	Contractor	10 January 2021
Tape around the high buildings for safe movement of workers.	Correction measures expected on 10 January 2021.	Contractor	10 January 2021
Some workers do not use PPE	Contractor supplied PPE to all workers, however some workers do not use it properly. EHS specialist required to instruct all workers to use PPE.	Contractor	10 January 2021

6.2. Recommendations

96. All open and partially closed issues, even closed issues, should be strictly monitored. Non-Compliance Notices must be issued after each site inspection, and the Consultant has to force Contractors formally respond to each NCN with appropriate photos of taken actions.

97. Actions to be completed and continued for the next reporting periods:

Table 13. Plans for next period

Action	Date
Keeping site clean	continuously
Workers on site should be equipped with gloves, masks, keep social distance in order to prevent COVID-19 disease and the workers working on height of the buildings with safety belts, safety tapes and warning signs must be installed	continuously
It is necessary to continuously improve health and safety of workers and the community throughout the entire project cycle	continuously
Drinking water, medications, and first aid kits must be available on-site continuously – throughout the entire project cycle.	continuously
Portable toilets should be provided	continuously
Shower cabins should be placed	summer period
Post-construction environmental audit reports and Final Environmental monitoring reports to be prepared by the Contractors Akelik group (DS-WW-02) and Shindong Enercom (DS-WW-03)	March-April 2021
Post-construction environmental audit reports for each contract to be prepared by the Consultant's Environmental Specialists	March-April 2021

ANNEX: ENVIRONMENTAL MANAGEMENT PLAN

ITEM	Mitigation Measures	Monitoring Details/Also Performance Indicators	Timing	Executing Unit	Reporting Responsibility
2. CONSTRUCTION PERIOD - prepare and use this section as construction monitoring checklist					
2.1 Excessive construction-period air pollution	Emissions will be kept to a minimum by: 1. ensuring that the contractor's fleet of vehicles are properly maintained 2. Use acceptable fuel and haul loads within specified limits. 3. Vehicle idling time limits to no more than 3 minutes and 4. equipment maintenance specifications will be imposed through construction inspection and regular reporting, 5. Dust control at the construction site will be particularly stringently controlled by watering, setting strict speed limits of no more than 30kph in or near settled areas, and clean-up of paved haul roads. 6. Equipment such as the diesel generator will be included in the emission control program and will be and regularly tuned to prevent excessive TPM/soot pollution.	Inspect 6 issues as defined in EmiT and provide contractor with feedback Monitoring details- smoke-belching vehicles, equipment- air and construction sites (visual monitoring). Actions from #1 to #4 should be taken before starting to workdays (in the garages of contractors if it is existence) and Actions #5 and #6 should be conducted in soil roads at construction site where it may cause air pollution due to dust formation.	Once a month	PDC	PCU
2.2 Excessive noise	Identify sensitive sites like hospitals, retirement homes, sanatoriums and urban park areas, then reduce noisy activities such as jack hammers during low noise periods and if needed set up temporary noise baffles.	Measure noise levels at sensitive receptor sites and discuss non-compliance with contractor. Noise to be measured when equipment operating, 08.00-10.00 and 15.00-16.00. Confirm that no work is done near sensitive sites after 18:30 Monitoring details - all kind of noise generated machines (basic monitoring nearby sensitive areas).	Once a month, <i>Once a week if the construction site is in nearby households and sensitive sites.</i>	PDC/ Contractor	PCU
2.3 Inadequate use of tree clearing, and replanting plan prepared during pre-construction period	Contractor to be handed the tree cutting and replanting plan at the start of construction and carefully monitored- Contractor must review, update with the PDC and Djizak Province "Suvokova" then adhere to the plan A system of severe fines, involving replanting of mature trees, for cutting and damaging trees outside the cutting areas, will be implemented. Any installations where there are mature roadside shade trees, designers will be contacted to realign the sewer into the road to avoid cutting	Inspect construction areas to ensure that tree cutting is avoided wherever possible and organize immediate meeting with PDC chief engineer and PMU to discuss any noncompliance. Monitoring details- vegetation sites where the construction is conducted. Monitoring revegetation regularly, especially during initial growth to ensure stable growth and lasting groundcover	When work at a new site begins and where trees are possibly cut.	Contractor and PCU	PCU

ITEM	Mitigation Measures	Monitoring Details/Also Performance Indicators	Timing	Executing Unit	Reporting Responsibility
2.4. Poor Haul Road Maintenance	<ol style="list-style-type: none"> The contractor will need to inspect roads used for transport of earthworks every day, making sure that debris waste materials and earth has not fallen off the back of trucks generating safety concerns and dust; and that immediate clean up occur if problems are noted. All such trucks will need to be equipped with covers or nets preventing spillage and reducing wind-blown dust from vehicles 	<p>Inspect haul roads at least weekly and report condition. PDC to conduct random inspections as well.</p> <p>Confirm that trucks hauling material that is dusty, have covers or tarpaulins.</p> <p>Monitoring details - vehicles and roads that vehicles are used (visual monitoring).</p>	Weekly	Contractor and PCU	PCU
2.5 Inadequate traffic management when WWTP construction taking place	<p>Traffic management will be essential since most of the sewer placement work will be in the middle or on one side of existing roads, requiring an effective traffic management operation. To that end contractors will require either automated lights or two flagmen at each major work area to help keep traffic from backing up too badly.</p> <p>Confine heavy construction related traffic in sensitive access roads to the construction sites to avoid accidents.</p> <p>Minimize transportation during high traffic periods (e.g., when students are entering or leaving school) to minimize potential traffic accidents</p>	<p>Drive construction roads and report on traffic management and report excessive delays and suggest corrective actions</p> <p>Monitoring details - vehicles and roads during high traffic periods (visual monitoring).</p>	At all times that work is going on	PDC and PCU	PCU
2.6 Failure to adhere to construction related good housekeeping practices, including solid and sanitary waste management and	<p>Contractors will adhere to standard good housekeeping practices as defined in the contract Terms & Conditions and Contract Specifications. Special considerations will be given to</p> <ol style="list-style-type: none"> management of construction waste and water equipment lubricants and fuel, including management and collection of waste oils and fuel particularly related to refueling depots, maintenance areas and diesel generator sets Sewage will require latrines or chemical toilets with complete clean up after the construction is complete. Garbage will be collected and properly disposed of after recycling and sorting, <p>The contractor shall brief all construction workers in basic sanitation and health care issues occurring in the Djizak area.</p>	<p>Inspect construction work areas and report the 3 items listed</p> <p>Monitoring details - solid and waste debris, construction site and special containers (visual and basic monitoring if required).</p>	Weekly	PDC and PCU	PCU
2.7 Inadequate occupational health and safety measures in the workplace	<ol style="list-style-type: none"> The contractor will provide PSE such as hardhats, boots noise protection, safety vests and eye protection where necessary, such as when welding, grinding or cutting. Fencing or safety ribbon will be required at every worksite, marking the boundary for safe viewing Sanitary toilet, washing and eating facilities (if 	<p>Inspect construction work areas and report on the 5 items listed</p>	Monthly	PDC and PCU	PCU

ITEM	Mitigation Measures	Monitoring Details/Also Performance Indicators	Timing	Executing Unit	Reporting Responsibility
	needed) will be provided 4. Safe potable water supply will be available at all times and within easy reach of workers 5. Industrial grade first aid kits will be at every work site				
2.8 The lack of technical capacity with the contractor to implement and report on environmental safeguards, leading to the collapse of the environmental safeguard's actions	At the start of the construction period, but before field mobilization the PMU and PDC will deliver a short training workshop to the contractor as well as "Suvokova" staff, focusing on the SSEMP preparation, the mitigation and monitoring tasks, responsibility to the public and proper documentation. Approximately 12-13 people will be involved, plus three people delivering the workshop.	Complete a meeting with contractor to determine the effects of the training workshop and if the contractor is capable to implement the SSEMP	At start of construction period, but 4-6 months after the technical workshop	PDC	PCU
2.9 Failure to properly manage petroleum products such as fuel, lubricants, leading to spill and contamination.	Contractor will be required to have the following spill prevention measures in place at all work sites: 1. All fueling to be done on a concrete surface provided with spill catch tank that can be cleaned, and all spilled fuel recovered and recycled based on discussions with fuel supplier. 2. All repair and maintenance work must either be done on a concrete surface with oil spill catch basin or oil catch pans must be provided at all service areas and training provided to all 'mechanics'. 3. A fueling areas must be equipped with proper fuel nozzles 4. All fuel tanks must have means for containment of accidental spills. 5. Any spills must be cleaned up according to RoU norms and codes within 24 hours of the occurrence, with contaminated soils and water treated according to RoU norms and codes.	Inspection undertaken quarterly and report filed, addressing the 5 points listed	Quarterly	PDC/ PCU	PCU
2.10 Contractor does not provide monthly monitoring updates or quarterly monitoring checklists or semi-annual summary reports or final construction period SSEMP implementation report	At start of construction period the contractor will be given and schedule for report submission and during the training period samples of the reports required will be presented.	Remind contractor of this requirement and collect reports	As per the reporting schedule	PDC and PCU	PCU
2.11 Post construction rehabilitation and landscaping	After the contractor must immediately rehabilitate and re-landscape the area to preconstruction conditions, including re-establish access	Inspection of all installation sites, interview with local people to gauge how well the rehabilitation was done-prepare checklist-type report	As soon as an installation area has been cleared by contractor	Contractor	PCU

ITEM	Mitigation Measures	Monitoring Details/Also Performance Indicators	Timing	Executing Unit	Reporting Responsibility
			and rehabilitation is done.		
2.12. Industrial enterprises not complying with pretreatment requirements.	At the start of the final construction year, PDC and PCU will provide a detailed briefing to contractor on effluent pre-treatment requirements and the provisions of Decree No.11 as it applies to the industries.	Maintain record of briefing and content of material and attendance	Start of last year of construction	PCU, PDC	PCU and CSA
3. OPERATION PERIOD					
3.1 No WWTP influent & effluent monitoring program	RoU Norms require that STPs complete monthly effluent testing. This will be enforced by the Provincial water & sewerage enterprise.	Collect sampling and analysis records monthly	Monthly as required by Norms	Djizak Province "Suvokova"	Djizak Province "Suvokova" Chief Engineer
3.2 No or poor maintenance of tree replanting and landscaping along sewer placement construction corridors	CSA and the PCU will advise the Chief Engineer of Djizak Province "Suvokova" of the importance maintaining and enhancing the tree replanting and landscaping activity undertaken as the sewer were buried. Repair and further improvements to this work, particularly along urban streets will be implemented by the Provincial water and sewerage enterprise.	Conduct monitoring program as indicated	2X/year	Djizak Province "Suvokova"	Djizak Province "Suvokova" enterprise Chief Engineer
3.3 No annual monitoring Report	CSA/ PCU will inform the Djizak Province "Suvokova" Chief Engineer of the mandatory ADB requirement of preparation of the annual environmental safeguards report	Collect monitoring report from Djizak Province "Suvokova"	Annual	City Suvokova	City Suvokova
3.4 No sludge management plan	CSA/ PCU will advise the Djizak Province "Suvokova" Chief Engineer of the need to prepare a sludge management plan for submission to CSA and ADB	Obtain such a plan from	During 1 st year of operations	City Suvokova	City Suvokova
3.5 Sludge and soil on which it is used must be sampled and analyzed.	Sludge shall be analyzed for heavy metals.	Conduct monitoring program as indicated	every 12 months.	City Suvokova	City Suvokova
4. PRECONSTRUCTION THROUGH THE OPERATING PERIOD - WQ MONITORING					
4.0 Sewage pollution continues	Given the problems with monitoring and tracking of changes in water quality in the Ulkursay Canal and after it discharges downstream, a monitoring program has been designed and is discussed in paragraph 160.	Monthly WQ data tables to be provided to CSA and Djizak Province "Suvokova" as well as ADB as required. Changes in WQ conditions will be the best performance indicators	Monthly	CSA and PMU, followed by city Suvokova	CSA and Suvokova

CSA = Communal Services Agency "Kommunhizmat", PCU = Project Coordination Unit, PDC = Project Development Consultant, WQ = water quality, WWTP = wastewater treatment plant