

Environmental Monitoring Report

Semestral Report: July – December 2020
June 2021

Uzbekistan: Amu Bukhara Irrigation System Rehabilitation Project

Prepared by Project Implementation Unit for the Ministry of Water Resources of Uzbekistan Republic and Asian Development Bank

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Semi-annual Environmental Monitoring Report

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Reporting period: July – December 2020

Uzbekistan: Amu Bukhara Irrigation System Rehabilitation Project

(Financed by the ADB Loan 3025-UZB/ 3026-UZB)

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For the Ministry of Water Resources of Uzbekistan Republic and Asian Development Bank

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ABBREVIATIONS

ABIS	Amu Bukhara Irrigation System
ADB	Asian Development Bank
BISA	Basin Irrigation System Administration
EEC	Environmental Expert of Consultant
EIA	Environmental Impact Assessment
EHS	Environment, Health and Safety
EMP/ SSEMP	Environmental Management Plan/ Site-Specific Environmental Management Plan
EMMP	Environmental Management and Monitoring Plan
EMR	Environmental Monitoring Report
GoU	Government of Uzbekistan
HGME	Hydrogeological Meliorative Expedition
IA	Implementing Agency
IEE	Initial Environmental Examination
ISA	Irrigation System Administration
MAWR	Ministry of Agriculture and Water Resources
M&ES	Monitoring and Evaluation Specialist
NPC	Nature Protection Committee
PIU	Project Implementation Unit
SE	Site Engineer
SC	Supervision Consultant
SO	Safeguards Office
WCA	Water Consumers' Association

1 INTRODUCTION

1.1 Preamble

1. This report represents the Semi - Annual Environmental Monitoring Review (SAEMR) for AMU BUKHARA IRRIGATION SYSTEM REHABILITIATION PROJECT.
2. This report is the 11th EMR for the project.

1.2 Headline Information

3. In order to realize a sustainable and reliable water supply in ABIS, the Project is expected to achieve the following outputs:
 - a) Construction of one new pump station, and modernization and rehabilitation of four existing ones;
 - b) Increase in the conveyance efficiency of the main canal of ABIS;
 - c) Increase in the capacity of Basin Irrigation System Administration (BISA), Irrigation System Administrations (ISAs), water consumers' associations (WCAs), and farmers to adapt to climate change; and
 - d) Efficient management of project and ABIS
4. The Ministry of Agriculture and Water Resources (MAWR) has agreed to implement the Environmental Management Plan (EMP) and submit regular reports on its implementation. The Initial Environmental Examination Report (IEE), including the EMP, has been published on the Asian Development Bank (ADB) website. During project implementation, ADB and Japan International Cooperation Agency (JICA) will each be responsible for safeguard compliance in their respective project activities.

2 PROJECT DESCRIPTION AND CURRENT ACTIVITIES

2.1 Project Description

5. The Amu Bukhara Irrigation System (ABIS) Rehabilitation Project is located in the central part of Uzbekistan on the right bank of Amu Darya River bordering to Turkmenistan. Bukhara is 563 km far from the capital Tashkent. The project covers lands of Bukhara and Navoi provinces. The ABIS is very important for the area and gives life as an oasis.
6. The ABIS supplies water to already irrigated lands, cities, settlements, and industries in Bukhara and Navoi provinces through a series of large cascading pump stations and thousands of kilometers of conveyance canals. It also drains the excess water through drainage system outside of the project area.
7. The ABIS, with a command area of 315,000 ha, serves the irrigated lands of the Bukhara Zarafshan and Karakul oases and the Karaul Bazar massif. The population in the ABIS command area is about 1,788,000 people, including 1,550,000 in Bukhara and 239,000 in two districts of Navoi, of which 68% live in rural areas and fully rely on irrigated agriculture. It is particularly important to supply reliable water to these people in the region. ABIS also supplies water for municipal and industrial purposes.
8. The aim of the Project is to improve the irrigated agriculture and water resources management in the ABIS, with the goal of promoting sustainable economic and social welfare of communities dependent upon ABIS. The Project objectives are:
 - a) modernization and rehabilitation of obsolete pump stations;
 - b) increase of conveyance efficiency in ABIS main canal;
 - c) increase climate change adaptation capacity; and
 - d) increase efficiency of project management and irrigation system management.

2.2 Project Contracts and Management

9. Summary of civil works contracts and works' progress is summarized in Table 2-1. All awarded contracts included EMPs cleared by ADB and any conditions of applicable national EIA/IEE clearance.

Table 2-1 Summary of Civil Works Contracts and works' progress

Contractor	Scope	Contract Signed	SSEMP approved	Environmental personnel		Civil Work Start	Civil Work Ends		Progress	
				Environmental officer	Health and safety officer		as per contract	actual	As of 30 June 2020	As of 31 Dec 2020
China National Technical Import and Export Corporation (CNTIC)	Construction of Amu Bukhara 1 NEW Pump Station (ABISRP 01)	02/08/2019	Not approved yet.	Egamov Murod	Egamov Murod	16.11.2019	DATE	ongoing	0.14 %	13.71%
Consortium LLC "Kogon Suv Qurilish" and JSC "Amubukhorokanalkurilish"	Modernization and Rehabilitation of Amu Bukhara Main Canal Regulating Structure (ABISRP 02)	18/03/2016	06/12/2016	Izamov Amin Ashurovic hired at the project beginning period. Does not exist anymore.	Izamov Amin Ashurovic hired at the project beginning period. Does not exist anymore.	30.11.2016	12.04.2022	ongoing	28.10 %	28.10 %
Hebei Construction Group Co., Ltd, Hebei Province, China	Modernization & Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03.01)	21/12/2016	14/12/2017	Miao Guowang	Miao Guowang	01.09.2018	15.04.2021	22.04.2021	55.074 %	100%
Hebei Construction Group Co., Ltd, Hebei Province, China	Modernization & Rehabilitation of Kizil Tepa Pump Station (ABISRP 03.02)	21/12/2016	14/12/2017	Zhang Zehui	Zhang Zehui	01.09.2018	30.04.2021	ongoing	73.06 %	93.26 %
Consortium LLC "Kogon Suv Qurilish" and JSC "Amubukhorokanalkurilish"	Rehabilitation of inter-farm and on-farm pilot irrigation network (ABISRP/NCB/04)	30/06/2016	06/12/2016	Izamov Amin Ashurovic	Izamov Amin Ashurovic	22.08.2016	10.09.2017	10/09/2017	100%	100%

SSEMP = site-specific environmental management plan

10. A list or table of main organizations involved in the project and relating to Environmental Safeguards is given at Table 2-2 below. It includes lender, borrower, PIU, Main Contractor/s and significant sub-contractors, environmental staff of various organizations with their names and contact details.

Table 2-2 Environmental Safeguards of ABISRP

Lender	
Organization:	Asian Development Bank
Staff Name	SKyoko Uematsu
Designation	Environment Specialist, CEF
E-mail	kuematsu@adb.org
Staff Name:	Feruza Insavaliyeva
Designation	Associate Safeguards Officer, URM
Email:	finsavaliyeva@adb.org
Tel:	+ 998 78 1401920
Organization:	ADB/RETA International Environmental
Staff Name:	Keti Dgebuadze
Designation:	Safeguards Consultant
E-mail:	kdgebuadze.consultant@adb.org
Tel:	+995 322 250619
Borrower/PIU	
Organization:	Ministry of Water Resources of Uzbekistan Republic
Environmental Staff:	Project Implementation Unit
E-mail:	Mr. Sardor Pulatov
Tel:	abistr@mail.ru
	+998 99 895 82 31
Supervision Consultant	
Organization:	JV Temelsu International Engineering Services Inc.
Environment Specialist (International):	Sheladia Associates Inc
Email:	Mr. Saban Cimen
Tel:	saban.cimen@temelsu.com.tr
	+998 90 317 36 11
Environment Specialist (local):	Mr. Sherzod Sunatulin
Email:	shonic1987@mail.ru
Tel:	+998 90 966 59 54
Contractors	
Construction of Amu Bukhara 1 NEW Pump Station (ABISRP 01)	
China National Technical Import and Export Corporation (CNTIC)	
Environmental Staff:	Egamov Murod
Modernization and Rehabilitation of Amu Bukhara Main Canal Regulating Structure (ABISRP 02)	
Consortium LLC "Kogon Suv Qurilish" and JSC "Amubukhorokanalkurilish"	
Environmental Staff:	-
Modernization and Rehabilitation of Kuyu Mazar and Kizil Tapa Pump Stations (ABISRP 03)	
Modernization & Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03.01)	
Hebei Construction Group Co., Ltd, Hebei Province, China	
Environmental Staff:	Mr. Miao Guowang
Email:	66326632@qq.com
Tel:	+998972812666
Modernization & Rehabilitation of Kizil Tapa Pump Station (ABISRP 03.02)	
Hebei Construction Group Co., Ltd, Hebei Province, China	
Environmental Staff:	Mr. Zhang Zehui
Email:	505735114@qq.com
Tel:	+998997568278
Rehabilitation of inter-farm and on-farm pilot irrigation network (ABISRP 04)	
Kogon Suv Qurilish LLC	
Environmental Staff:	Mr. Izomov Amin Ashurovic

11. The following organizations and/or staff will be responsible for environmental monitoring:
- Basin Irrigation System Authority of Regions
 - Contractor of any Subcomponent
 - Civil Engineer of Consultant
 - Climate Change Mitigation Specialist
 - Environmental Expert of Consultant
 - Electrical Engineer of Consultant
 - Ministry of Health
 - Project Manager of Consultant
 - Project Implementation Unit
 - Water Consumer Associations
12. The key staff for the environmental management and monitoring activities is Mr. Sardor Pulatov, as PIU's Monitoring and Evaluation Specialist (M&ES). He has all responsibilities and tasks related to environment, land, social (including involuntary resettlement and indigenous people), and poverty and gender aspects in accordance with the environment and social safeguard documents and Summary Poverty Reduction and Social Strategy, all of which are project linked documents. Specifically, PIU Monitoring and Evaluation Specialist:
- takes responsibility for monitoring and evaluating performance targets and indicators with baselines indicated in the Design and Monitoring Framework of the project document for all dimensions with support from the implementation consultant;
 - provides necessary guidance to the Poverty, Social and Gender Officer in the PIU of Bukhara to collect relevant information on poverty, gender, and social aspects in relation to the Design and Monitoring Framework of the project document and Summary Poverty Reduction and Social Strategy.
13. Additionally, in relation to the environmental aspects, with the support from the international consultant the PIU Environmental Monitoring and Evaluation Specialist will:
- ensure that Environmental Management Plan (EMP) is updated during detailed design completed,
 - ensure that bidding documents include all requirement to implement IEE and its EMP;
 - ensure that the bidder selected will have adequate resources to implement and update EMP;
 - undertake safeguards monitoring activities and prepare safeguard reports to be submitted to ADB;
 - ensure that all construction works will be taken place in the permanent land possession of ABISA;

- if additional land required for construction works, ensure that land acquisition and resettlement plan is prepared in accordance to ADB SPS 2009 as well as the Government law and regulation related with land acquisition; and
 - ensure that other project-related tasks are complied with ADB SPS 2009 and Government requirement.
 - to review and approve Site-Specific and Topic Specific Management Plans prepared by Construction Contractor.
14. PIU as responsible IA for the project recruited a Supervision Consultant (SC) – consortium: «Temelsu International Engineering Services Inc» and «Sheladia Associates Inc.». The International environmental expert (Saban Cimen) and national environmental specialist of Supervision Consultant (EEC) – Sherzod Sanatulin assist M&ES of PIU in the supervision of the construction activities under the Project.
15. The part of the work of the Environmental Experts of the Consultant is to develop a capacity building training program for Contractor's Environmental Officers in order to increase the implementation efficiency of environmental monitoring. The timing of this program will be just before the commencement of civil works. Environmental Experts of the Consultant will develop the content of training.

2.3 Project Activities During Current Reporting Period

16. China National Technical Import and Export Corporation (CNTIC) Contractor of the Construction of Amu Bukhara 1 New Pump Station (ABISRP 01) continues construction of living and office areas at construction camp. It has been reported by the Contractor that cumulatively 92 rooms of living and office areas have been completed and 15 houses were still under construction in October 2020. The construction and power supply of the living area and workshop area have been completed in September 2020. The installation and debugging of one set of concrete batching plant has been finished in October 2020 and commissioning of two sets of concrete mixing plant equipment have been completed and calibrated in November 2020. The site material warehouse and electromechanical equipment warehouse are leveled, hardened and prepared for use in December 2020. The first and second set of design drawings have been submitted on 13/July/2020 and 16/July/2020. Design study continues since that time.
17. Regarding to the Contract of the Modernization and Rehabilitation of Amu Bukhara Main Canal Regulating Structure (ABISRP 02), within the reporting period, the Contractor has worked only on one of the water regulating structures and completed rehabilitation works on relevant structure. First week of July only demobilization of Contractor's personnel from Hydrosystem Peresecheniye, since the rehabilitation works had been completed there until end of June 2020. During July 10, 2020 - December 15, 2020 – works have been suspended. Although the extended completion date (as per Addendum No.3) of the Contract has also expired, since all the Contractual Works have not been completed yet, a new addendum (Addendum No.4) has

recently been signed and the completion date of the Contract has been extended until April 12, 2022. December 15, 2020 to December 30, 2020 - Construction of bypass canal and cofferdams for the rehabilitation works of Regulator ABMK-2 on Hydrosystem Prokop has been commenced.

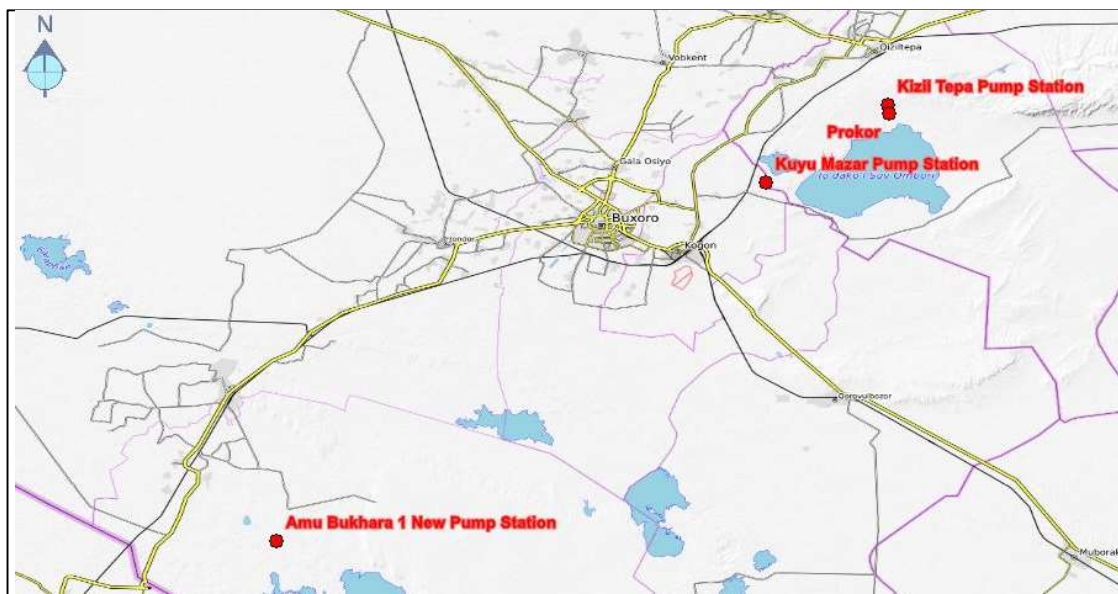
18. Under the Modernization and Rehabilitation of Kuyu Mazar and Kizil Tepa Pump Stations (ABISRP 03) there are two contracts: Modernization & Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03.01) and Kizil Tepa Pump Station (ABISRP 03.2). Contracts were signed and became effective by September 2017.
19. **Kuyu Mazar PS:** The works have been substantially completed except some minor repair works in and around the PS building. As soon as the preparation works are completed, inspection and test procedures for completion of the facilities will be implemented.
20. **Kizil Tepa PS:** The Contractor mainly engaged with some civil repair works until end of August 2020. As of the end of August 2020, the remaining 2 pump units (units # 6 and 7) have been delivered to the Contractor for replacement, relevant replacement works are in progress. Proceedings were continued through the Employer for approval of the change orders including the additional works, mainly for surge protection measures, and procurement of additional spare parts.
21. The main project activities carried out during the reporting period include the following:

Table 2-3 Construction Activities Carried out During Reporting Period (July 2020 - December 2020)

Site	Construction Activity	Number of Workers	
		Maximum	Minimum
Construction of Amu Bukhara 1 New Pump Station (ABISRP 01)			
Bukhara-Olot	Construction of working camp continues,	108	54
Modernization and Rehabilitation of Amu Bukhara Main Canal Regulating Structure (ABISRP 02)			
Prokor	Construction of regulator on Prokop	25	5
Modernization and Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03.1)			
Bukhara-Kuyu Mazar	Kuyu Mazar Pump Station	32	17
Modernization and Rehabilitation of Kizil Tepa Pump Station (ABISRP 03.2)			
Navoi-Kizil Tepa	Kizil Tepa Pump Station	76	46

22. The construction works at Amu Bukhara 1 New Pump Station has been started in February 2020 during the (10th) reporting period (January 2020 - June 2020), just after the mobilization of the Contractor. The construction works are still under progress.
23. The construction works at Kuyu Mazar and Kizil Tepa Pump stations have been started during the (6th) reporting period (January 2018 - June 2018) and has not been fully completed yet.

Figure 2-1 Map of Construction Sites Showing Construction Activities Carried out During Reporting Period (July 2020 -December 2020)



24. A map of construction sites during the reporting period is given at the Figure 2-1.
25. Photos of construction works are given in Annex II and below.

	
<p>Construction of Amu Bukhara 1 NEW Pump Station (ABISRP 01) Dewatering works</p>	<p>Amu Bukhara Main Canal Regulating Structure (ABISRP 02) Construction Works at Peresechenie Regulator</p>
	
<p>Modernization and Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03.1) Improvement of Slopes</p>	<p>Modernization and Rehabilitation of Kizil Tepa Pump Station (ABISRP 03.2)</p>

26. No changes happened during the reporting period of the project design from that which was assessed in the Impact Assessment phase of the project and is set out in the Initial Environmental Examination/Environmental Impact Assessment.

2.4 Description of Any Changes to Agreed Construction methods

27. No changes to any construction processes have been observed during the construction period.

3 ENVIRONMENTAL SAFEGUARD ACTIVITIES

3.1 General Description of Environmental Safeguard Activities

28. The activities carried out during the reporting period by the environmental staff who are related to the project activities have been summarized at the following Table 3-1.

Table 3-1: Environmental Safeguards Activities Carried out During Reporting Period (July 2020 - December 2020)

Environmental Safeguard Activities
<p>The International environmental expert (Saban Cimen) of Supervision Consultant (EEC)</p> <ul style="list-style-type: none"> - No field activity of international expert has been recorded since January 2020 due to COVID-19 travel restriction. - Review of the SAEMR with the information provided by the local experts and supervision team, and clear the report before submission to ADB. - Ensure the corrective actions are implemented by the deadline.
<p>Construction of Amu Bukhara 1 New Pump Station (ABISRP 01) (Responsible Environmental Manager: Egamov Murod)</p> <ul style="list-style-type: none"> - Submitted EMP integrated to Monthly Progress Reports (July, August, September, October, November and December 2020)
<p>Modernization and Rehabilitation of Amu Bukhara Main Canal Regulating Structure (ABISRP 02) (Responsible Environmental Manager: Not designated)</p> <ul style="list-style-type: none"> - During the reporting period the contractor has not submitted any environmental monitoring reports, conducted training or activity etc. Therefore, any Environmental Safeguard Activity has not been observed during reporting period.
<p>Modernization and Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03.1) (Responsible Environmental Manager: Miao Guowang)</p> <ul style="list-style-type: none"> - Preparation of environmental monitoring reports (July, August, September, October, November and December 2020) - Training of Working Staff on Environmental Issues
<p>Modernization and Rehabilitation of Kizil Tepa Pump Station (ABISRP 03.2) (Responsible Environmental Manager: Zhang Zehui)</p> <ul style="list-style-type: none"> - Preparation of environmental monitoring reports (July, August, September, October and December 2020) - Training of Working Staff on Environmental Issues.

29. Due to travel restrictions applied due to COVID-19 international expert was not able to visit site during the reporting period.

3.2 Site Inspections

30. Regular site monitoring visits were carried out during the reporting period by PIU and Environmental Specialist of SC to check up realization of environmental protection measures parallel to civil works inspection as indicated below:

Table 3-2: Environmental Inspections Carried out During Reporting Period (July 2020 - December 2020)

Date	Conducted by	Purpose	Findings	Corrective Actions
Daily Routine site visits	Supervision Consultant Site Engineers (SC)	General, Environmental and OHS	Usage of PPE has not been used in all	Daily check, and immediate cautions to the Contractors.

31. The contractor of Construction of Amu Bukhara 1 New Pump Station (ABISRP 01) has submitted third version of Site Environmental Management Plan (SEMP) on 28th January 2020 to PIU/SC. The comments given to SEMP by PIU/SC has been delivered to the contractor on 4th February 2020. Fourth, updated version of the SEMP has been received on 21st April 2020 and comments is given to the fourth version of the SEMP in 22nd April 2020. SEMP is expected to comply with the contract requirement at the next submission. The SEMP has not been submitted during the reporting period.
32. It has been requested from the contractors to send monthly environmental monitoring activities which could be integrated into the monthly progress report. During the reporting period the environmental monitoring reports (EMR) which have been received from the contractors have been indicated in the Table 3-1.
33. Construction of Amu Bukhara 1 New Pump Station (ABISRP 01) contractor has issued the EMR for July, August, September, October, November and December 2020 which have been integrated into the Monthly Progress Reports of the relevant months.
34. Modernization and Rehabilitation of Amu Bukhara Main Canal Regulating Structure (ABISRP 02) Contractor has not submitted any EMR for months between July, August, September, October, November and December 2020. Based on the explanations made Paragraph 17 the extended completion time of the ABISRP 02 Contractor has expired on 12.04.2020 and no further time extension has been granted to the Contract since then. At present, the Contract remains virtually in suspension. The Employer now seeks for the possibility of a re-organization of the Contractor to enable execution of the remaining work, which is about half of the original Contract amount. Although the Contractor has not officially abandoned the site, there is almost no construction activity ongoing in the Project area. During this rearrangement the Contractor could not involve with the reporting including environmental activities. After re-commencement of the construction activity, the ABISRP 02 Contractor shall certainly be compelled to comply with the requirements as to the environmental issues and complete the outstanding issues.
35. Modernization and Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03.1) contractor has issued the EMR for July, August, September, October, November and December 2020 on time.
36. Modernization and Rehabilitation of Kizil Tepa Pump Station (ABISRP 03.2) contractor has issued the EMR for July, August, September, October and December 2020 on time. The

contractor was not able to issue the EMR of November due to quarantine conditions of COVID-19 pandemic applied in the working camp.

37. Mr. Miao Guowang is the Health, Safety and Environmental Manager of Kuyu Mazar Pump Station (ABISRP 03.1) contractor. The local Health, Safety and Environmental expert of the contractor is Mr. Aziz Juraev.
38. Mr. Zhang Zehui is the Health, Safety and Environmental Manager of Kizil Tepa Pump Station (ABISRP 03.2) contractor in cooperation with local Health, Safety and Environmental expert Mr. Aziz Juraev.
39. It has been declared by Construction of Amu Bukhara 1 New Pump Station (ABISRP 01) contractor that, Mr. Yang Guo You will be in field as the Health, Mr. Bekmurodov Hasan has been appointed as Health, Safety and Environmental expert than he has been shifted with Mr. Egamov Murod Kuchkorovich as local Health, Safety and Environmental expert.
40. Environmental progress of the Modernization and Rehabilitation of Amu Bukhara Main Canal Regulating Structure (ABISRP 02) Contractor considered to be minor. See performance evaluation form at the Annex I. The construction activities in Agitma Regulator, Dvoynik Regulator, Rostguy, Djilvan, Peresechenie Regulator has been completed. Construction works in the, Prokop regulator area in progress. (See Annex II).
41. Environmental progress of the Modernization and Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03.1) contractor is moderate. The environmental record keeping system has been formed but day by day recording has not been applied for health and safety training records. Health and safety conditions, social leisure areas have been created for the workers. Environmental and health and safety labelling has been improved at the sites, nevertheless, needs observation. Hazardous waste management storage area developed and separation of solid wastes in progress. See performance evaluation form at the Annex I.
42. Environmental progress of the Modernization and Rehabilitation of Kizil Tepa Pump Station (ABISRP 03.2) contractor is under progress. The environmental record keeping system has been established, however daily recording has been applied for solid waste records. Health and safety conditions, social leisure areas have been created for the workers. Environmental and health and safety labelling has been improved at the sites, nevertheless, needs observation. Hazardous waste management storage area developed. Separation of solid wastes still is not actively applied. See performance evaluation form at the Annex I.
43. The dredged material excavated at the forebay area of the Kuyu Mazar Pump station has been disposed to a site. A permission from the Novai Ecology and Environmental Protection Headquarter obtained on 22/04/2019 by the Modernization and Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03.1) contractor for disposal of the dredged material. The spoil deposit area should be levelled according to Chapter 11 on Architecture and Landscaping, Article 11.12

of the General Technical Specification of Contract (GTS). Besides that, the conditions of depositing of dredged material have been explained on this permission as “the spoil area should be levelled and planted”. The contractor should settle the planting of the levelled spoil area with the Novai Ecology and Environmental Protection Headquarter.

44. The dredged material excavated at the forebay area of the Kizil Tapa Pump station has been disposed to a site. A permission from the Bukhara Ecology and Environmental Protection Headquarter obtained on 21/02/2019 by the Modernization and Rehabilitation of Kizil Tapa Pump Station (ABISRP 03.2) contractor for disposal of the dredged material. The spoil deposit area should be levelled according to Chapter 11 on Architecture and Landscaping, Article 11.12 of the General Technical Specification of Contract (GTS). Besides that, the conditions of depositing of dredged material have been explained on the ecological report which is attached to this permission that “After levelling, perennial decorative trees, such as elm, mulberries and spruce shall be planted”. The contractor should settle the planting of the levelled spoil area with the Bukhara Ecology and Environmental Protection Headquarter.
45. Status of non-compliances revealed for previous period are provided in the Table 3-3 below:

Table 3-3 Statuses of non-compliances

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
1	ABISRP 02 Camp Site	19/01/18	Environment	Sewage not disposed properly	To comply with the national legislation and contract requirements	N1	Major	31/03/18	Low	Izomov Amin Ashurovic	Closed	22/06/19
2	ABISRP 02 and ABISRP 04 Working Sites	19/01/18	Environment	Hazardous waste collection area doesn't exist	No need for corrective actions	1	Minor	26/01/18	Low	ABISRP 02 Contractor	Closed	26/01/18
3	ABISRP 02 and Working Sites	19/01/18	Environment	Record of old tires and accumulators have not been kept	Provide the necessary data	N2	Minor	01/03/18	Medium	Izomov Amin Ashurovic	Closed	22/06/19
4	ABISRP 02 Working Sites	19/08/17	Safety	Labeling doesn't exist for hazardous areas	To comply with the national legislation and contract requirements.	N3	Major	01/03/18	High	Izomov Amin Ashurovic	Closed	22/06/19
5	ABISRP 02 Working Sites and Camps	19/01/18	Environment	Separation of hazardous and solid waste	Sort solid waste separately.	N4	Minor	12/02/18	Low	Izomov Amin Ashurovic	Closed	22/06/19
6	ABISRP 02 Working Sites	19/01/18	Environment	Soil contamination with oil leakage	To cover the spill area with sand and dispose the contaminated land to the solid waste disposal area of municipality	2	Minor	12/02/18	Low	Izomov Amin Ashurovic	Closed	19/01/18

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
7	ABISRP 02 Working Sites	19/01/18	Health	Hygienic conditions, protection against climatological conditions and light conditions poor	comply with contract requirements	N5	Minor	12/02/18	Low	ABISRP 02 Contractor	Closed	22/06/19
8	ABISRP 02 Camp Site	19/01/18	Safety	Firefighting equipment or fire extinguisher doesn't exist	comply with contract requirements	N6	Major	12/02/18	High	ABISRP 02 Contractor	Closed	22/06/19
9	ABISRP 03.1 Kuyu Mazar Office	26/11/17	Environment	Environmental expert has not been hired	Hire the national environmental expert	N7	Major	01/03/18	High	ABISRP 03.1 Contractor	Closed	14/02/18
10	ABISRP 03.2 Kizil Tepa Office	26/11/17	Environment	Environmental expert has not been hired	Hire the national environmental expert	N8	Major	01/03/18	High	ABISRP 03.2 Contractor	Closed	14/02/18
11	ABISRP 03.1 Kuyu Mazar	26/11/17	Environment	SEMP not prepared	Preapare SEMP	N9	Major	20/12/17	High	ABISRP 03.1 Contractor	Closed	14/12/17
12	ABISRP 03.2 Kizil Tepa	26/11/17	Environment	SEMP not prepared	Preapare SEMP	N10	Major	20/12/17	High	ABISRP 03.2 Contractor	Closed	14/12/17
13	ABISRP 03.1 Kuyu Mazar Office	26/11/17	Environment	Environmental Record System has not been established.	Establish the environmental recording system and record the environmental monitoring activities.	N11	Major	31/12/17	High	ABISRP 03.1 Contractor	Closed	14/05/18

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
14	ABISRP 03.2 Kizil Tapa Office	26/11/17	Environment	Environmental Record System has not been established.	Establish the environmental recording system and record the environmental monitoring activities.	N12	Major	31/12/17	High	ABISRP 03.2 Contractor	Closed	14/05/18
15	ABISRP 03.1 Kuyu Mazar Office	26/11/17	Social	Grievance Redress Mechanism is not established	Establish the GRM and log books	N13	Major	31/01/18	High	ABISRP 03.1 Contractor	Closed	14/05/18
16	ABISRP 03.2 Kizil Tapa Office	26/11/17	Social	Grievance Redress Mechanism is not established	Establish the GRM and log books	N14	Major	31/01/18	High	ABISRP 03.2 Contractor	Closed	14/05/18
17	ABISRP 02. Contractor	18/07/18	Environment	EMR prepared per two months	Prepare and submit EMR monthly	N15	Minor	10/08/18	Medium	ABISRP 02 Contractor	Open	
18	ABISRP 03.1 Kuyu Mazar Construction Site	17/12/18	Environment	Hazardous wastes observed at site	Follow the rules stated in Hazardous Waste Management Plan, regularly check the site	N16	Major	30/06/19	High	ABISRP 03.1 Contractor	Closed	18/06/19
19	ABISRP 03.2 Kizil Tapa Construction Site	17/12/18	Environment	Oil Spills observed at site	Clean and regularly check the site	N17	Major	30/06/19	High	ABISRP 03.2 Contractor	Closed	17/06/19
20	ABISRP 03.2 Kizil Tapa Contractor	17/12/18	Environment	The dust formation has been observed at unpaved roads	Spray the unpaved roads with water and regularly check the site	N18	Minor	30/06/19	High	ABISRP 03.2 Contractor	Closed	17/06/19

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
21	ABISRP 03.1 Kuyu Mazar Contractor	18/12/18	Environment	The replacement of Environmental Manager has not been declared	Inform PIU/SC	N19	Minor	01/02/19	Low	ABISRP 03.1 Contractor	Closed	04/02/19
22	ABISRP 03.2 Kizil Tapa Contractor	18/12/18	Environment	The replacement of Environmental Manager has not been declared	Inform PIU/SC	N20	Minor	01/02/19	Low	ABISRP 03.2 Contractor	Closed	04/02/19
21	ABISRP 03.1 Kuyu Mazar Contractor	18/12/18	Environment	The permission for the disposal site of the dredged material has not been obtained	Obtain the permission	N21	Major	01/02/19	High	ABISRP 03.1 Contractor	Closed	22/04/19
22	ABISRP 03.2 Kizil Tapa Contractor	18/12/18	Environment	The permission for the disposal site of the dredged material has not been obtained	Obtain the permission	N22	Major	01/02/19	High	ABISRP 03.2 Contractor	Closed	21/02/19
23	ABISRP 03.1 Kuyu Mazar Contractor	31/12/18	Environment	EMR has not been submitted regularly	All previous EMR's will be send	N23	Major	01/02/19	High	ABISRP 03.1 Contractor	Closed	15/01/19
24	ABISRP 03.2 Kizil Tapa Contractor	31/12/18	Environment	EMR has not been submitted regularly	All previous EMR's will be send	N24	Major	01/02/19	High	ABISRP 03.2 Contractor	Closed	15/01/19
27	ABISRP 03.2 Kizil Tapa Contractor	17/06/19	Environment	Hazardous waste storage area doesn't exist	Hazardous waste storage area shall be constructed	N25	Major	27/06/19	High	ABISRP 03.2 Contractor	Closed	28/09/19

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
28	ABISRP 03.2 Kizil Tepa and ABISRP 03.1 Contractor	17/06/19	Safety	HSE training records couldn't be presented to ADB mission	Conduct training for Kuyu Mazar & Kizil Tepa Contractor's	N26	Major	30/06/19	High	Supervision Consultant	Closed	22/06/19
29	ABISRP 03.1 Kuyu Mazar Contractor	18/06/19	Environment	Hazardous material/waste storage area hasn't been constructed according to standards	Hazardous material/waste storage shall be re-constructed according to the standards	N27	Major	30/07/19	High	ABISRP 03.1 Contractor	Closed	28/09/19
30	ABISRP 03.1 Kuyu Mazar Contractor	18/06/19	Health	Smoke has been formed in the welding area	Ventilation shall be provided in welding area	N28	Major	30/07/19	High	ABISRP 03.1 Contractor	Closed	28/09/19
31	ABISRP 02 Working Sites	21/06/19	Safety	PPE not used by the staff at Kharkhur Construction Site	Daily check, and immediate cautions to the Contractor	N29	Major	01/08/19	High	Supervision Consultant	Closed	28/12/19
32	ABISRP 03.1 Kuyu Mazar Contractor	18/06/19	Environment	Dredged material storage area left without leveling (GTS of Contract Chapter 11 Article 11.12) and planting as defined in the Permission	Level the area and plant	N30	Major	19/10/20	High	ABISRP 03.1 Contractor	Open	
33	ABISRP 03.2 Kizil Tepa Contractor	17/06/19	Environment	Dredged material storage area left without	Level the area and plant	N31	Major	19/10/20	High	ABISRP 03.2 Contractor	Open	

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
				leveling (GTS of Contract Chapter 11 Article 11.12) and planting as defined in the Permission								
34	ABISRP 01 Contractor Amu Bukhara 1 Contractor	26/12/19	Environment	SEMP not completed	Finalize SEMP	N32	Major	31/01/20	High	ABISRP 01 Contractor	Open	
35	ABISRP 03.2 Kizil Tapa Contractor	27/12/19	Safety	some fire extinguishers' expiration date passed	Replace the fire extinguishers which are expired	N33	Major	31/01/20	High	ABISRP 03.2 Kizil Tapa Contractor	Closed	10/01/20
36	ABISRP 03.2 Kizil Tapa Contractor	27/12/19	Safety	Health and safety training records not kept regularly	Keep the record regularly	N34	Minor	04/01/20	High	ABISRP 03.2 Kizil Tapa Contractor	Closed	10/01/20
37	ABISRP 03.2 Kizil Tapa Contractor	27/12/19	Environment	Demolished concrete left in site	Dispose the demolished waste to a site shown by the authorities	N35	Major	27/02/20	High	ABISRP 03.2 Kizil Tapa Contractor	Closed	10/01/20
38	ABISRP 03.1 Kuyu Mazar Contractor	28/12/19	Environment	Solid waste disposal records not kept regularly	Keep the record regularly	N36	Minor	04/01/20	High	ABISRP 03.1 Contractor	Closed	10/01/20
39	ABISRP 03.1 Kuyu Mazar Contractor	28/12/19	Environment	Hazardous solid waste collection and separation not active	Put in progress again hazardous solid waste collection and separation	N37	Major	11/01/20	High	ABISRP 03.1 Contractor	Closed	06/01/20

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
40	ABISRP 03.1 Kuyu Mazar Contractor	28/12/19	Safety	Safety measures properly not applied	Conduct additional health and safety training for the staff	N38	Major	31/01/20	High	ABISRP 03.1 Contractor	Closed	10/01/20

3.3 Issues Tracking (Based on Non-Conformance Notices)

46. During the previous reporting period (January 1st, 2020 - June 30th, 2020) the observed Non-Conformance issues have been recorded and are given below in the table related to the construction activities of project components. The Table 3-3 gives the present situation on these tracked non-conformance notices.
47. ABISRP 01 Contractor has prepared and submitted SEMP for the fourth time on 21/04/2020. Required revisions that are given to the ABISRP 01 Contractor by SC about the SEMP are minor. Therefore, SEMP is expected to be approved at the next submission. SEMP of the contractor has not been received within the reporting period.
48. Despite of repetitive warnings, ABISRP 02 Contractor doesn't pay attention to correct actions related to reporting the activity therefore this non-conformance issue remains open, since 10/08/2020.
49. During the reporting period (July 1st, 2020- December 31st, 2020) Non-Conformance issues of Modernization and Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03.1) and Modernization and Rehabilitation of Kizil Tepa Pump Station (ABISRP 03.2) have not been closed, related to the levelling and planting of the dredged material storage area which has still time till deadline agreed with the contractor.
50. During the reporting period (July 1st, 2020- December 31st, 2020) no new Non- Conformance issues have been recorded, but there are non-conformance issues which are lasting from the previous reporting periods. The contractors have been informed about their non-conformances in written manner including the deadline agreed with the contractor, when these non-conformances have been detected. These lasting Non-Conformance issues are about the construction activities of Amu Bukhara 1 NEW Pump Station (ABISRP 01) Amu Bukhara Main Canal Regulating Structure (ABISRP 02), Modernization and Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03.1) and Modernization and Rehabilitation of Kizil Tepa Pump Station (ABISRP 03.2) contracts. See the table below.

Non-Conformances	Corrective measures	Implementation deadline
Construction of Amu Bukhara 1 New Pump Station (ABISRP 01)		
SEMP not completed	Finalize SEMP	31/01/20 (Open)
Modernization and Rehabilitation of Amu Bukhara Main Canal Regulating Structure (ABISRP 02)		
EMR of the Contractor not prepared	Prepare EMP	10/08/18 (Open)
Modernization and Rehabilitation of Kuyu Mazar and Kizil Tepa Pump Stations (ABISRP 03)		
Semi-annual EMR R.08.P. 39 at ABISRP 03.01 Kuyu Mazar Construction Site dredged material storage area left without levelling (GTS Chapter 11 Article 11.12) and planting as defined in the and Environmental Permission.	Level the area and plant.	19/10/20 (Open)
Semi-annual EMR R.08.P. 40 at ABISRP 03.02 Kizil Tepa Construction Site dredged material storage area left without levelling (GTS Chapter 11 Article 11.12) and Environmental Permission.	Level the area and plant.	19/10/20 (Open)

51. During this reporting period (July 1st, 2020- December 31st, 2020) no new Non- Conformance issues have been recorded. There are not any issues have closed from the previous reporting period. Total number of Non-Conformance issues observed for Project is 40, out of which 90% has been closed. (Table 3-4).

Table 3-4 Summary of Issues Tracking Activity for Current Period

Total Number of Issues for Project	40
Number of Open Issues	4
Number of Closed Issues	36
Percentage Closed	90%
Issues Opened This Reporting Period	0
Issues Closed This Reporting Period	0

52. The distribution of Non-Conformance issues based on priority is shown at the

53. Figure 3-1 and non-conformance level at the Figure 3-2.

Figure 3-1: Summary of Issues by Priority

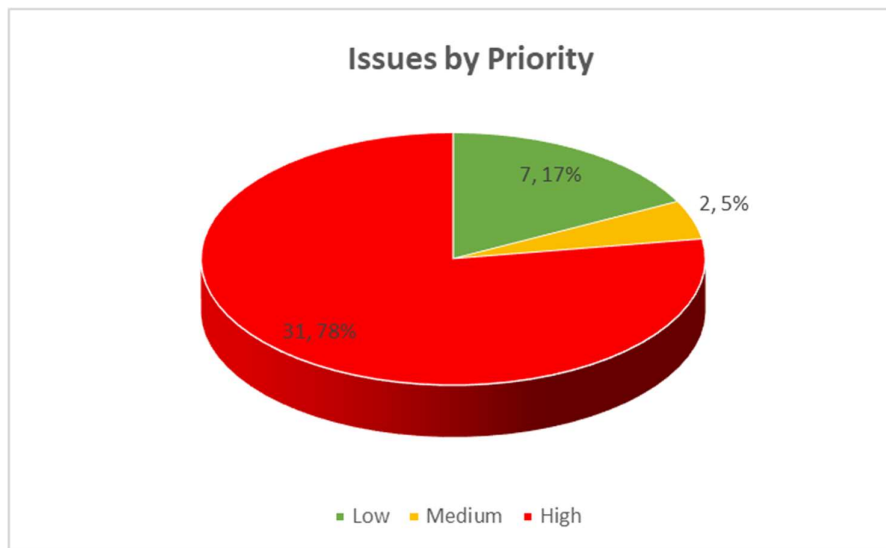
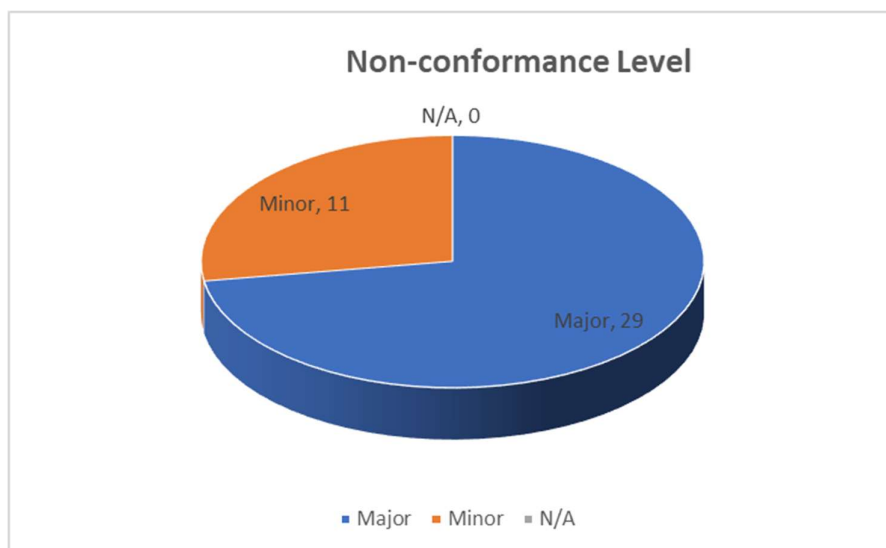
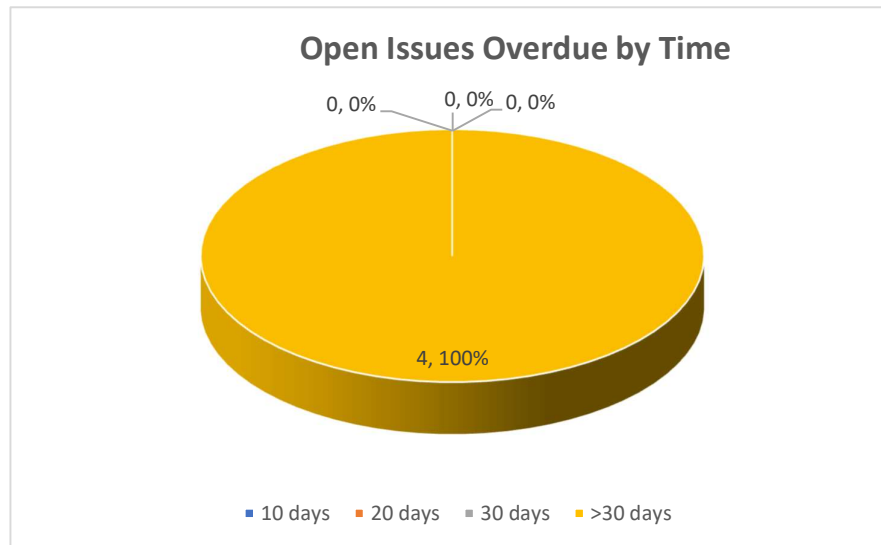


Figure 3-2: Summary of Issues by Non-Conformance



54. Duration to close any issue takes approximately 5.2 months. The distribution of days required to close any issue has been shown in Figure 3-3.

Figure 3-3: Open Issues Overdue by Time



3.4 Trends

55. Based on the record time, the trends of issues closed has been given at the following.

Semi-annual Report No	Total Number of Issues opened at Reporting Period	% of issues closed on time	% of issues closed late
6	6	60%	40%
7	6	60%	40%
8	7	15%	15%
9	7	40%	60%
10	0	44%	56%
11	0	44%	56%

3.5 Unanticipated Environmental Impacts or Risks

56. During the reporting period (July 1st, 2020 – December 31st, 2020) the outbreak of Coronavirus Disease (COVID-19) has affected working conditions especially in the ABISRP 03.02 Kizil Tepa Construction Site on November 2020. Additional anti- COVID - 19 measures have been considered as unanticipated environmental impact and health and safety plans of the all-main contractors have been issued considering the COVID- 19 epidemic.

4 RESULTS OF ENVIRONMENTAL MONITORING

4.1 Overview of Monitoring Conducted during Current Period

57. On 5 August 2020, a local worker was diagnosed with COVID-19 at the construction area of Contractor of Construction of Amu Bukhara 1 NEW Pump Station (ABISRP 01). Subsequently, quarantine conditions have been applied on the site with a comprehensive disinfection.
58. At the construction site of the Contractor of modernization and Rehabilitation Kizil Tepa Pump Station (ABISRP 03.01), the results of nucleic acid testing dated October 28 2020 showed that 33 (32 Chinese and 1 Uzbek) out of 76 (64 Chinese and 12 Uzbek) were positive. 3 people were admitted to hospital for treatment on October 29 2020. According to the results of second testing dated October 30 2020 on 64 people, 32 were positive. In total, 35 (with 3 hospitalized patients included) were negative. Till now, all positives were hospitalized for treatment. Priorities in the work of safety next month: follow up the recovery of hospitalized positives, suspend works at site to ensure safety.
59. According to EMP, Contractors are responsible for conduction of environmental monitoring activities for environmental impacts caused during the construction. These monitoring activities are based on visual observations. There are no more requirements on environmental monitoring included in EMP and as following in SEMP's submitted by the Contractors. Submitted EMR of each contractor includes the monitoring results of environmental and health and safety activities. Contractor of Construction of Amu Bukhara 1 NEW Pump Station (ABISRP 01) has submitted EMR which are included in Monthly progress reports. The Contractor of Modernization and Rehabilitation of Amu Bukhara Main Canal Regulating Structure (ABISRP 02) does not submit any EMR. The Contractor of modernization and Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03.01) submitted EMR regularly. The Contractor of modernization and Rehabilitation Kizil Tepa Pump Station (ABISRP 03.01) could not submit the EMR only in November 2020 due to quarantine conditions of COVID-19 has been applied at the construction site.
60. During the reporting period no complaints were received from people living in nearby residential areas for any construction site. In case of receiving such complains, further elaboration in environmental monitoring activities and solving and or settling the problematic issues needed.

4.1.1 Air Emissions and Ambient Air Quality

61. At all the construction sites appropriate measures were taken to prevent the pollution of atmospheric air, to limit the dust level from working vehicles and enforce strict observance of safety rules at main road crossing, along main roads, the mahalla streets and near sub-project construction sites.
62. While excavation and transportation of excavating materials, additional environmental requirements were followed: Schedule transportation activities by avoiding peak traffic periods; Use tarpaulins to cover loose material that is transported to and from the site by truck.
63. Inspection of exhaust emissions of vehicles and machinery used has been controlled in Uzbekistan with a regulation named "Implementation of Mandatory Technical Inspection of Vehicles the Machinery" and numbered 54 which is in force since January 31st, 2003. Each Contractor should hold a valid permission for the vehicles and machineries used in the construction activities. Therefore, the vehicles and machineries used in construction activities do not exceed limits as far as they hold a valid permission from relevant Government authorities.
64. According to the IEE the nature of the project activities, will not generate significant quantities of emissions, therefore visual monitoring of dust has been envisaged at the Environmental Management Plan of the project. Since there is not any change in the main project activities, no need for monitoring of air quality except the method stated in Environmental Management Plan given at IEE:

4.1.2 Wastewater and Ambient Water Quality

65. The Contractor of Construction of Amu Bukhara 1 NEW Pump Station (ABISRP 01) is constructing the working camp area with septic tanks and toilet facilities. Temporary toilets exist in the field.
66. The toilet facilities for Contract ABISRP 02 exist in the Prokor regulator area. But their conditions are poor. Since the number of workers are less in number, the wastewater produced during the daily activities have been directly filtered to the ground. The contamination risk of these effluents to the canals are low.
67. Closed septic tanks exist both for Kuyu Mazar Pump Station (ABISRP 03.1) and Modernization and Rehabilitation of Kizil Tepa Pump Station (ABISRP 03.2) camp sites. The collected sewage has been transferred by septic tank trucks to disposal site. In the working field workers use toilets located at the existing pump stations.

68. During the canal cleaning works it is unavoidable to form temporary turbidity and sediment problems. Existing water quality of the irrigation water turbid and high in sediment amount, therefore this temporary effect could not be differentiated, unless the sediment amount is measured before and during the cleaning activity.

4.1.3 Noise

69. The contractors have fit the daily regular working hours. It has been reported in EMR of Contractors to use new equipment and vehicle which is appropriate for the Occupational Health and Safety Noise levels. Since no grievance has been received from the public it has been considered that noise level does not have any effect on public.
70. The Uzbek national construction noise norms that are relevant to all stages of the construction phase are provided by law KMK 2.01.08-96 —Protection from noise detailed in Table 4-1.

Table 4-1. Uzbek construction noise norms (KMK 2.01.08 96 —Protection from noise)

Premises and territories	Equivalent sound pressure levels, L_{eq} (dB)									Level of Sound, (dBA)
	31,5	63	125	250	500	1000	2000	4000	8000	
1. Hospital and sanatorium wards, operating hospitals	68	51	39	31	24	20	17	14	13	25
2. Living rooms in apartments, living premises in rest/care homes, sleeping rooms in children boarding schools	72	55	44	35	29	25	22	20	18	30
3. Doctor's offices in hospitals, sanatoriums, polyclinics, audience halls of concert-halls, rooms in hotel, living rooms in campus	78	59	48	40	34	30	27	25	23	35
4. Hospital and sanatorium territories adjacent to the buildings	78	59	48	40	34	30	27	25	23	35
5. Territories adjacent to living houses (in 2 m from cladding structures), residential areas of neighborhoods and housing estates, grounds of schools and preschool institutions, school territories	84	67	57	49	44	40	37	35	33	45
6. Class premises, exercise rooms, auditoriums of schools and other educational facilities, conference halls, audience halls of theatres, clubs, cinemas, halls for court sessions and meetings.	82	63	52	45	39	35	32	30	28	40
7. Administration working premises, working premises of design and engineering organizations, scientific and research institutes	86	71	61	54	49	45	42	40	38	50
8. Café, restaurant, canteen halls, lobby of theatres and cinemas	89	75	66	59	54	50	47	45	43	55

Premises and territories	Equivalent sound pressure levels, L_{eq} (dB)									Level of Sound, (dBA)
	31,5	63	125	250	500	1000	2000	4000	8000	
9. Trading halls of shops, sport halls, waiting halls of airports and transport stations, reception centers of housekeeping/ municipal services	93	79	70	63	58	55	52	50	49	60

71. The Sanitarian Rules and Norms on providing allowed noise level into the living building, public building and territory of living area (SanR&N No.0267-09) establish the maximum admissible noise level into the living areas, both inside and outside buildings, given in the Table 4-2.

Table 4-2. Admissible noise level into the living area, both inside and outside the buildings (SanR&N No.0267-09)

Name of Location		Level of sound pressure, octave bands with average geometric mean frequencies (dB)								Level of Sound, (dBA)
Living room of flats, bedrooms of resorts (inside)	Daytime 07:00-23:00	63	52	45	39	35	32	30	28	40
	Night-time 23:00-07:00	55	44	35	29	25	22	20	18	30
Territories adjacent to living houses (outside)	Daytime 07:00-23:00	75	66	59	54	50	47	45	43	55
	Night-time 23:00-07:00	67	57	49	44	40	37	35	33	45

72. The World Bank's "Environmental, Health and Safety General Directives, 2007 (EHS)" is functional instead of PPAH. EHS stipulates that noise at any activity shall not exceed the levels given in the Table 4-3 for given receptors, nor shall they result in a greater increase of ambient noise than 3 dB at the nearest receiving area outside the site.

Table 4-3. Noise Level Guideline (EHS)

Receptor	One Hour L_{Aeq} (dBA)	
	Daytime 07:00-22:00	Nighttime 22:00-07:00
Residential; institutional; educational	55	45
Industrial; commercial	70	70

73. Nearest Receptor to the Working Areas are listed below:
- The nearest receptor to the Amu Bukhara 1 New Pump Station (ABISRP 01) construction site is the settlement area (houses) which has been located approximately 250 m northwest.
 - The nearest receptor to the Kuyu Mazar Pump Station (ABISRP 03.1) construction site is settlement area (houses), which has been located approximately 750 m southwest.
 - The nearest receptor to the Kizil Tapa Pump Station (ABISRP 03.2) construction site is settlement area (houses), which has been located approximately 500 m west.

74. Amu Bukhara 1 New Pump Station (ABISRP 01) construction site contractor has not monitored the noise levels, the relevant non-conformance notice will be submitted to the contractor within the following reporting period.
75. Kuyu Mazar Pump Station (ABISRP 03.1) construction site Modernization contractor has monitored the noise levels in the locations given at the Table 4-4. The measurements have been realized by Mr. Miao Guowang with a Digital sound level meter (model no: AR824/SL4001A. The level of the measurements has not exceeded the Daytime Industrial; commercial noise guideline values described paragraph 72. The contractor has not monitored the noise levels at the nearest receptors defined at paragraph 73, since no complains have been received from the relevant settlement areas.

Table 4-4. Noise Level Measurements at Kuyuz Mazar Pump Station (ABISRP 03.1) Construction Area

Date	Noise Level, dB(A)								
	Location								
	Sedimentation settling basin			Pump station building			Square in front of pump station		
	08:00	11:30	08:00 - 11:30	08:00	11:30	08:00 - 11:30	08:00	11:30	08:00 - 11:30
01/07/2020	64	62	54	46	64	47	52	49	39
03/08/2020	63	62	61	53	63	62	64	40	63
02/09/2020	62	64	62	63	63	62	64	56	64
02/10/2020	63	63	64	64	62	64	63	63	64
01/11/2020	64	62	63	63	63	64	62	61	59
03/12/2020	63	64	64	62	64	63	64	64	62

76. Kizil Tapa Pump Station (ABISRP 03.2) construction site Modernization contractor has monitored the noise levels in the locations given at the Table 4-5. The measurements have been realized by Mr. Zhang Zehui with a Digital sound level meter (model no: AR824/SL4001A). The level of the measurements has not exceeded the Daytime Industrial; commercial noise guideline values described paragraph 72. The contractor has not monitored the noise levels at the nearest receptors defined at paragraph 73, since no complains have been received from the relevant settlement areas.

Table 4-5. Noise Level Measurements at Kizil Tapa Pump Station (ABISRP 03.1) Construction Area

Date	Noise Level, dB(A)								
	Location								
	Sedimentation settling basin			Pump station building			Square in front of pump station		
	08:00	11:30	08:00 - 11:30	08:00	11:30	08:00 - 11:30	08:00	11:30	08:00 - 11:30
02/07/2020	62	60	53	50	56	48	50	42	32
02/08/2020	60	61	58	68	65	64	60	62	63
01/09/2020	60	63	61	63	65	62	62	62	61
02/10/2020	59	61	58	63	61	62	59	62	61
01/11/2020	63	62	63	61	64	60	60	61	58
02/12/2020	62	66	62	67	62	61	65	62	59

4.1.4 Hazardous waste

77. Within the scope of the Modernization and Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03.1) the dismantling of old electrical equipment was carried out in July 2020. During the dismantling relevant nation authority has supervised the dismantling of the old electrical equipment. The staff who is responsible in the pump station took over the dismantled electrical equipment, and kept them in the warehouse of regional department of Amu Bukhara main canal system.
78. Within the scope of the Modernization and Rehabilitation of Kizil Tepa Pump Station (ABISRP 03.2) the dismantling of old electrical equipment was carried out in September 2020. During the dismantling relevant nation authority has supervised the dismantling of the old electrical equipment. The staff who is responsible in the pump station took over the dismantled electrical equipment, and kept them in the warehouse of regional department of Amu Bukhara main canal system.



Kuyumazar Pumping Station Pumping and Electrical Installations



Kiziltepa Pumping Station Pumping and Electrical Installations

4.2 Trends

79. Based on the visual inspection and EMR reports the air, noise and water quality conditions has not considerably changed during the project construction span. The existing performance of the Contractors has been evaluated based on the Environmental Management Plan (EMP) of the overall project and attached to Annex I.

4.3 Summary of Monitoring Outcomes

80. The established monitoring system is advice to be kept as they are it is early to make any comments on ceasing/altering monitoring since the construction activities already has been started.

4.4 Material Resources Utilization

4.4.1 Current Period

81. The utilization of electricity, water and other materials for Amu Bukhara 1 New Pump Station (ABISRP 03.1) construction site during the reporting period is given Table 4-6.

Table 4-6 Material Resources Utilization at Amu Bukhara 1 New Pump Station Construction Site

Resources	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Total
Water (m ³)	205	306	289	362	278	156	1,596
Cement (tons)	12	-	-	14	12	4	42
Iron (tons)	-	-	-	-	-	-	-
Fuel (m ³)	45	60	52	47	31	12	247
Electricity (kwh)	15,632	25,102	21,022	68,020	754,025	67,156	950,957
Sand (m ³)	20	12	4	21	-	-	57

82. The utilization of electricity, water and other materials for Amu Bukhara Main Canal Regulating Structure (ABISRP 02) construction site during the reporting period is given Table 4-7.

Table 4-7 Material Resources Utilization at Amu Bukhara Main Canal Regulating Structure Construction Sites

Resources	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Total
Water (m ³)	-	-	-	-	-	-	-
Cement (tons)	-	-	-	-	-	-	-
Iron (tons)	-	-	-	-	-	-	-
Fuel (m ³)	-	-	-	-	-	50	50
Electricity (kwh)	-	-	-	-	-	-	-
Sand (m ³)	-	-	-	-	-	-	-

83. The utilization of electricity, water and other materials for Kuyu Mazar Pump Station (ABISRP 03.1) and Kizil Tapa Pump Station (ABISRP 03.2) construction sites are given Table 4-8 and Table 4-9 respectively.

Table 4-8 Material Resources Utilization at Kuyu Mazar Pump Station Construction Site

Resources	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Total
Water (m ³)	32	29	26	24	25	22	158
Cement (tons)	45	48	36	25	46	35	235

Iron (tons)	11	13	10	26	13	13	86
Fuel (m³)	53	34	31	27	28	22	195
Electricity (kwh)	55	42	43	33	62	66	301
Sand (m³)	12	23	16	13	15	12	91

Table 4-9 Material Resources Utilization at Kizil Tepa Pump Station Construction Site

Resources	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Total
Water (m³)	60	57	55	49	27	56	304
Cement (tons)	65	61	59	32	32	45	294
Iron (tons)	15	13	13	11	11	12	75
Fuel (m³)	72	61	70	42	42	53	340
Electricity (kwh)	57	68	54	52	21	72	324
Sand (m³)	31	21	22	20	20	21	135

4.4.2 Cumulative Resource Utilization

84. In previous reporting period the resource utilization records have not been kept. The following data given at Table 4-9 covers cumulative material resource utilization at Amu Bukhara 1 New Pump Station (ABISRP 03.1) construction sites for available reporting periods.

Table 4-10 Cumulative Material Resources Utilization at Amu Bukhara 1 New Pump Station Construction Site

Resources	Reporting Period		Total
	10	11	
Water (m³)	20	1,596	1,616
Cement (tons)	40	42	82
Iron (tons)	0	0	0
Fuel (m³)	15	247	262
Electricity (kwh)	7,000	950,957	957,957
Sand (m³)	65	57	122

85. In previous reporting period the resource utilization records have not been kept. The following data given at Table 4-11 covers cumulative material resource utilization at Amu Bukhara Main Canal Regulating Structure (ABISRP 02) construction sites for available reporting periods.

Table 4-11 Cumulative Material Resources Utilization at Amu Bukhara Main Canal Regulating Structure Construction Sites

Resources	Reporting Period		Total
	10	11	
Water (m³)	13	0	13
Cement (tons)	840	0	840
Iron (tons)	6.4	0	6.4
Fuel (m³)	12	5	17
Electricity (kwh)	1,700	0	1,700
Sand (m³)	912	0	912

86. The following data given at Table 4-12 and Table 4-13 covers cumulative material resource utilization at Kuyu Mazar Pump Station (ABISRP 03.1) and in Kizil Tapa Pump Station (ABISRP 03.2) construction sites for available reporting periods.

Table 4-12 Cumulative Material Resources Utilization at Kuyu Mazar Pump Station Construction Site

Resources	Reporting Period		Total
	10	11	
Water (m ³)	334	158	492
Cement (tons)	372	235	607
Iron (tons)	89	86	175
Fuel (m ³)	355	195	550
Electricity (kwh)	2392	301	2693
Sand (m ³)	155	91	246

Table 4-13 Cumulative Material Resources Utilization at Kizil Tapa Pump Station Construction Site

Resources	Reporting Period		Total
	10	11	
Water (m ³)	549	304	853
Cement (tons)	73	294	367
Iron (tons)	12	75	87
Fuel (m ³)	19	340	359
Electricity (kwh)	3108	324	3432
Sand (m ³)	129	135	264

4.5 Waste Management

87. Amu Bukhara Main Canal Regulating Structure (ABISRP 02) Contractor has not signed any contract related to the waste disposal. The waste originated from their construction and worker's daily activities disposed to the municipal solid waste disposal areas by their own trucks/tractors. Waste sorting activities were carried out, an agreement was signed with Olot Obod LLC for garbage disposal. According to the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 787, rubbish bins have been installed. All security measures have been taken.
88. The Contractor of Modernization and Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03.1) has submitted a Waste Management Plan on 11th May 2018 and Hazardous Materials Management Plan on 10th May 2018 (Semi-annual EMR R.06).
89. The solid waste disposal area of Contractor of Modernization and Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03.1) has been declared as Kuyu Mazar Solid Waste Disposal area which is approximately 3 km away from the Kuyu Mazar Pumping Station.

90. The Contractor of Modernization and Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03.1) has extended the period of the protocol signed with Toza-Khudud firm for collection, transfer, and disposal of the domestic solid waste. The protocol is valid until the 31st December 2020.
91. The Contractor of Modernization and Rehabilitation of Kizil Tepa Pump Station (ABISRP 03.2) has submitted a Waste Management Plan on 11th May 2018 and Hazardous Materials Management Plan on 10th May 2018 (Semi-annual EMR R.06).
92. The solid waste disposal area of Contractor of Modernization and Rehabilitation of Kizil Tepa Pump Station (ABISRP 03.2) has been declared a local Solid Waste Disposal area which is approximately 6 km away from the Kizil Tepa Pumping Station.
93. At the prospective SEMP of the Contractor of Amu Bukhara 1 New Pump Station (ABISRP 01) it has been indicated that contracts will be signed with the licensed companies in order to transport and dispose the solid and hazardous wastes.

4.5.1 Current Period

94. During the current reporting period (1st July 2020 – 31st December 2020) the Contractor of Amu Bukhara 1 New Pump Station (ABISRP 01) has dumped domestic solid waste to the site defined by Olot Obod LLC. The disposals records of garbage have not been kept by the contractor. This record will be required from the contractor as non-conformance notice during the next reporting period.
95. During the current reporting period (1st July 2020 – 31st December 2020) Amu Bukhara Main Canal Regulating Structure (ABISRP 02) Contractor has no record about the type, quantity of waste produced and disposed. Any domestic solid waste has not been observed at the construction and or camping sites.
96. During the current reporting period (1st July 2020 – 31st December 2020) the Contractor of Modernization and Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03.1) has dumped one times domestic solid waste to the site defined at Paragraph 92. The recorded disposals are given in the following table below. The transfer and disposal of domestic solid waste has been realized by Toza-Khudud firm.

Date of Solid Waste Transfer	Volume of Solid Waste (m ³)					Storage Area
	Type I Very Hazardous	Type II Hazardous	Type III Medium Hazard	Type IV Slightly Hazardous	Type V Nearly No Hazard	
08, August, 2019					16	Toza-Khudud
EMR-11 TOTAL	0	0	0	0	16	

97. During the current reporting period (1st July 2020 – 31st December 2020) the Contractor of Modernization and Rehabilitation of Kizil Tepa Pump Station (ABISRP 03.2) has dumped two

times domestic solid waste to the site defined at Paragraph 92. The recorded disposals are given in the following table below. The transfer and disposal of domestic solid waste has been realized by Toza-Khudud firm.

Date of Solid Waste Transfer	Volume of Solid Waste (m ³)					Storage Area
	Type I Very Hazardous	Type II Hazardous	Type III Medium Hazard	Type IV Slightly Hazardous	Type V Nearly No Hazard	
05,July,2020					6	Toza-Khudud
02,October,2020					6	Toza-Khudud
EMR-11 TOTAL	0	0	0	0	12	

4.5.2 Cumulative Waste Generation

98. During the current reporting period (1st July 2020 – 31st December 2020) totally 28 m³ of solid waste has been originated within the scope of Amu Bukhara Irrigation System Rehabilitation Project by the all contractors. The cumulative solid waste generation volume reached to 485.90 m³ during the current reporting period (1st July 2020 – 31st December 2020), including 42.00 m³ of recycled or reused solid waste. Approximately 9% of this cumulative waste volume has been restored for reuse and recycling purposes. The progress in solid waste disposal has been shown in the below table.

EMR Report Number	Total Volume (m ³)	
	Disposed	Recycled or Reused
6	6,90	0
7	54,62	42.00
8	29,88	0
9	123.00	0
10	201.50	0
11	28	0
Total	443.90	42.00

99. During the current reporting period (1st July 2020 – 31st December 2020) totally 28 m³ of solid waste has been originated from the Modernization and Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03.1) and Modernization and Rehabilitation of Kizil tepa Pump Station (ABISRP 03.2) construction sites. The cumulative solid waste generation volume for these components has reached to 443.90 m³ during the current reporting period (1st July 2020 – 31st December 2020).

	Volume (m ³)		
	Kuyu Mazar	Kizil Tepa	Total

EMR Report Number	Disposed	Recycled or Reused	Disposed	Recycled or Reused	Disposed	Recycled or Reused
6	3.00	0	3.90	0	6.90	0
7	42.62	0	12.00	42	54.62	42
8	11.88	0	18.00	0	29,88	0
9	53.00	0	70.00	0	123.00	
10	53.50	0	148.00	0	201.50	
11	16	0	12	0	28	0
Total	180.00	0	263.90	42.00	443.90	42

4.6 Health and Safety

4.6.1 Community Health and Safety

100. During the current reporting period there were no incidents occurred within the scope of Community Health and Safety issues, including the traffic accidents, except COVID-19 cases explained below.

4.6.2 Worker Health and Safety

101. It has been reported by CNTIC, Contractor of the Construction of Amu Bukhara 1 New Pump Station (ABISRP 01) that on 5 August 2020, a local worker was diagnosed with COVID-19. Subsequently, quarantine conditions have been applied on the site with a comprehensive disinfection. All construction personnel accepted tested for COVID-19 twice, and no new cases been reported on September 2020. In September 2020, the on-site internal containment measures have been ended, and the epidemic prevention and control measures such as quarantine, disinfection and temperature detection continue to be implemented. In order to prevent the spread of the epidemic to the construction site, the site continued to adopt closed, isolated management measures. Due to the impact of the epidemic, it is difficult to book space for freight trains from China to Uzbekistan, and the goods cannot be shipped to the site on time as planned which affects the construction plan.
102. Health and Safety Plan has been issued by contractors with COVID-19 risk assessment. The measures have been successfully applied by the Contractors. Besides that, when Uzbek authorities declared the measures to control COVID-19 the Chinese contactors have started to apply the training, health and safety procedures and disinfection at the working camp, vehicles, construction area within the scope of COVID-19 protection measures.
103. Contractor of the Construction of Amu Bukhara 1 New Pump Station (ABISRP 01), CNTIC has issued Health and Safety Plan considering the risk assessment and measures related to COVID-19 on 30/November/2020. Based on Health and Safety Plan and control measures, the following information has been reported by CNTIC, about the measures related to COVID-19 pandemic on November and December 2020. Total volume of the disinfectant used by all site

employees, supervision staff and visitors during that time is 30 l/month. The information about the positive cases are given at the paragraph 105.

Table 14. Personal Protective Equipment (PPE) Usage and Nucleic Acid Test Numbers

PPE type / Test	Unit	Used by (pcs)					
		Site Employees		Visitors		Supervision Staff	
Month	pcs	Nov.	Dec.	Nov.	Dec.	Nov.	Dec.
Medical Mask	pcs	6480	3348	42	40	600	600
FFPZ-FFP3- N95 Mask	pcs	-	-	-	-	-	-
Face Shield	pcs	-	-	-	-	-	-
Glove	pcs	3240	1674				
Nucleic acid test	1/month	108	54				
	2/month					20	20

104. Amu Bukhara Main Canal Regulating Structure (ABISRP 02) Contractor have carried out the construction activities in the Hydraulic structure "Prokor". Working staff use PPE due to, daily check, and immediate cautions to the Contractor of the SC team.
105. At the construction site of the Contractor of modernization and Rehabilitation Kizil Tepa Pump Station (ABISRP 03.01), the results of nucleic acid testing dated 28 October 2020 showed that 33 (32 Chinese and 1 Uzbek) out of 76 (64 Chinese and 12 Uzbek) were COVID-19 positive. 3 people were admitted to hospital for treatment on 29 October 2020. According to the results of second testing dated 30 October 2020 on 64 people, 32 were positive. In total, 35 (with 3 hospitalized patients included) were negative. Till now, all positives were hospitalized for treatment. Priorities in the work of safety next month: follow up the recovery of hospitalized positives, suspend works at site to ensure safety. October 28, 2020, GEMO-TEST was requested to test all 76 people in Kizil Tepa pump station (including 64 Chinese and 12 Uzbek). The contractor immediately activated the Emergency Plan for the Handling of COVID-19 Cases in Kizil Tepa Pump Station. Following the idea of putting people's life first, the headquarter of the contractor's company and the project management unit have set up the Leading Group for COVID-19 Prevention and Control respectively with a view to safeguarding the health of workers at site through all-out efforts. The role of the leading groups is to collect problems in connection with the prevention and control of COVID-19, advise, push, and supervise the implementation of relevant policies, and report the progress as required and in time. Based on the nucleic acid testing results, the contractor has separated the living quarters of workers into negative one and positive one, and contracted Kizil Tepa county health center to disinfect the camp zones twice a day in addition to the disinfection conducted by our own. The contractor put into use the medicines, masks, disposal lunchboxes, medical supplies and will make replenishment as necessary. The medical supplies were sufficient in stock and could be replenished before running out. With close attention paid by and great importance attached from the headquarter of the contractor's company, specific medical supplies and medicines purchased in China have been delivered on the way to the site. Under the support of PIU and coordination of Mr. Ostanov,

Head of OD ABMC, all of the contractor's positive patients had been admitted to Bkuhara Hospital for treatment. The camps were provided with disinfection barrels and corresponding destruction areas, and additionally with special toilets for positive workers. Afterwards disinfecting and adjusting the living quarters have been applied for those who will be cured and discharged later, and planning to increase the number of toilets and bathing facilities. In addition to those, conventional disinfection supplies distributed to every worker such as a packet of masks, disinfectant, sanitizer, wet napkin, a portion of fruits and milk able to sustain them one week are also provided on a weekly basis to supplement nutrition. The contractor is grateful to the Regional Health and Epidemiology Center Kizil Tepa Navoy for its daily arrangement of medical staff to the site for the measurement of oxyheinglobin saturation over positive patients, as well as to the Employer and the OD ABMC for their great assistance and strong support since the outbreak of the pandemic. No death of the COVID-19 positive workers was reported during the monitoring period.

106. The contractor of both Modernization and Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03.1) and Modernization and Rehabilitation of Kizil Tepa Pump Station (ABISRP 03.2) project HEBEI Construction Group has issued Health and Safety Plan considering the risk assessment and measures related to COVID-19 on 09/December/2020 per each project site separately.

4.7 Training

107. Mr. Miao Guowang as the Health and Safety Specialist of Kuyu Mazar Pump Station (ABISRP 03.1) contract has conducted regular HSE, environmental, site access and COVID-19 protection trainings for the Chinese staff working at the Kuyu Mazar construction site during the current reporting period (1st July 2020 – 31st December 2020).
108. Mr. Zhang Zehui as the Health and Safety Specialist of Kizil Tepa Pump Station (ABISRP 03.2) contract has conducted regular HSE, environmental, site access and COVID-19 protection trainings for the Chinese staff working at the Kizil Tepa construction site during the current reporting period (1st July 2020 – 31st December 2020).
109. Mr. Aziz Juraev as local HSE administrator of Kuyu Mazar Pump Station (ABISRP 03.1) contract and Kizil Tepa Pump Station (ABISRP 03.2) contract has conducted regular HSE, environmental, site access and COVID-19 protection trainings for the local staff working at both sites during the reporting period (1st July 2020 – 31st December 2020).

4.8 Summary of Monitoring Outcomes

110. Status of compliance with environmental safeguards related covenants in the Project's Loan Agreement signed between Republic of Uzbekistan and ADB on 21 November 2013¹ is summarized in **Table 15**.

¹ ADB. Loan Agreement (Special Operations [Concessional]) for Loan Amu Bukhara Irrigation System Rehabilitation Project (21 Nov. 2013). <https://www.adb.org/sites/default/files/project-document/79440/44458-013-sfj.pdf>

Table 15. Loan Agreement Compliance Status

Schedule	Paragraph	Covenant	Compliance Status
5	9 (a)	<u>Environment</u> The Borrower shall ensure that the preparation, design, construction, implementation, operation and decommissioning of the Project and all Project facilities comply with all applicable laws and regulations of the Borrower relating to environment, health and safety.	Being complied with All applicable laws and regulations of the Uzbekistan Republic is applied.
5	9 (b)	<u>Environment</u> The Borrower shall ensure that the preparation, design, construction, implementation, operation and decommissioning of the Project and all Project facilities comply with the Environmental Safeguards.	Being complied with. Environmental Safeguard Policy Statement (June 2009)
5	9 (c)	<u>Environment</u> The Borrower shall ensure that the preparation, design, construction, implementation, operation and decommissioning of the Project and all Project facilities comply with all measures and requirements set forth in the EII and the EMP and any corrective or preventative actions set forth in a Safeguards Monitoring Report or which are subsequently agreed between ADB and the Borrower.	Being complied with. Semiannual Environmental Monitoring Report has been prepared and disclosed at ADBs website regularly.
5	12	<u>Human and Financial Resources to Implement Safeguards Requirements</u> The Borrower shall make available necessary budgetary and human resources to fully implement the EMP.	Being complied with. The borrower makes available the budgetary and human resources to fully implement the EMP whenever required.
5	13 (a)	<u>Safeguards – Related Provisions in Bidding Documents and Works Contracts</u> The Borrower shall ensure that all bidding documents and contracts for Works contain provisions that require contractors to comply with the measures relevant to the contractor set forth in the IEE and the EMP (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set forth in a Safeguards Monitoring Report;	Being complied with. Bidding documents and contracts for various works under the project have been prepared include the necessary provisions envisaged in the IEE and EMP. During the construction whenever required necessary corrective or preventive actions have been applied.
5	13 (b)	<u>Safeguards – Related Provisions in Bidding Documents and Works Contracts</u> The Borrower shall ensure that all bidding documents and contracts for Works contain provisions that require contractors to make available a budget for all such environmental measures.	Being complied with. The borrower makes available the budget for environmental measures whenever required.

Schedule	Paragraph	Covenant	Compliance Status
5	13 (c)	<u>Safeguards – Related Provisions in Bidding Documents and Works Contracts</u> The Borrower shall ensure that all bidding documents and contracts for Works contain provisions that require contractors to provide the Borrower and MOTC 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 and the EMP.	Being complied with. No environmental, resettlement or indigenous peoples risks or impacts issues have been arisen during the implementation of the Project.
5	13 (d)	<u>Safeguards – Related Provisions in Bidding Documents and Works Contracts</u> The Borrower shall ensure that all bidding documents and contracts for Works contain provisions that require contractors to adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction;	Complied Bidding and contract documents contain provisions that require contractors to adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction.
5	13 (e)	<u>Safeguards – Related Provisions in Bidding Documents and Works Contracts</u> The Borrower shall ensure that all bidding documents and contracts for Works contain provisions that require contractors to reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.	Being complied with. For the completed project components pathways, other local infrastructure, and agricultural land to at least their pre-project condition has been restored.
5	14 (a)	<u>Safeguards Monitoring and Reporting</u> The Borrower shall submit semi-annual Safeguards Monitoring Reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission;	Not complied with. Semiannual Environmental Monitoring Report has been prepared and disclosed at ADBs website regularly. However, the relevant information has never been disclosed to affected persons.
5	14 (b)	<u>Safeguards Monitoring and Reporting</u> The Borrower shall 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 and the EMP, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan;	Being complied with To address unanticipated impact (COVID0-19 pandemic), COVID-19 health and safety management plans were prepared by each contractor and approved by the PMU and the supervision consultant. Control measures including the training and regular tests have been applied for protection COVID-19. The results of activities have been reported regularly.
5	14 (c)	<u>Safeguards Monitoring and Reporting</u> The Borrower shall report any actual or potential breach of compliance with the measures and requirements set forth in the EMP promptly after becoming aware of the breach.	During the project implementation period no actual or potential breach of that compliance with the measures and requirements set forth in the EMP has been observed.

Table 16. Implementation Status of EMP during the pre-construction period (Packages ABISRP-01, ABISRP-02, ABISRP- 03.1, ABISRP-03.2 and ABISRP-04)

Subject	EMP Requirement	Compliance Attained					Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
		ABISRP-01	ABISRP-02	ABISRP-03.1	ABISRP-03.2	ABISRP-04		
Health & safety	• Provide portable toilets;	Y	Y	Y	Y	Y		
	• Provide safety guards on exposed machinery;	Y	Y	Y	Y	Y		
	• Provide safety awareness training	Y	Y	Y	Y	Y		
Loss of biodiversity	• Determine critical diurnal and seasonal times.	Y	Y	Y	Y	Y		
	• Prepare and adhere to avoidance plan	Y	Y	Y	Y	Y		
Inaccurate survey maps	• Purchase and use of only new equipment;	Y	Y	Y	Y	Y		
	• Contractor to provide Professional Survey Engineer to manage survey works	Y	Y	Y	Y	Y		
Damage to facilities and workers	• Building design with a second category of fire resistance where all elements are made of fireproof or not-easy-to- burn materials;	Y	Y	Y	Y	Y		
	• Ensure free access to the facilities and availability of roads to them for O&M;	Y	Y	Y	Y	Y		
	• Placement of building and facilities considering fire breaks	Y	Y	Y	Y	Y		
	• Design according to CNR 2.01.03-96 and 3.04.02-97 "Corrosion Protection of buildings" to prevent effects on the quality of ground water	Y	Y	Y	Y	Y		
Siltation at the pump inlet canals	• At pump station Inlet canal design/silt basins to be checked for adequacy of silt removal.	Y	Y	Y	Y	Y		

Subject	EMP Requirement	Compliance Attained					Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
		ABISRP-01	ABISRP-02	ABISRP-03.1	ABISRP-03.2	ABISRP-04		
Decrease in water quality at downstream	<ul style="list-style-type: none"> At Pump house- drainage inlet Oil and water separators to be provided on internal drainage systems in the pump station if canal water carries >0.3 mg/l oil below drainage outlets. 	Y	Y	Y	Y	Y		
Possible serious accidents	<ul style="list-style-type: none"> At Pump station, Develop Worker Safety Plan that is compliant with Uzbekistan Labor Code 	Y	Y	Y	Y	Y		
Possible excessive corrosion of steel manifold and rising main	<ul style="list-style-type: none"> At Rising Mains, Evaluate relaying new manifold and rising main sections as above ground structures in salinized areas / Use of protective coating 	Y	Y	Y	Y	Y		
Enhanced accessibility to irrigation areas	<ul style="list-style-type: none"> Along ABMK and other channels upgrade existing crossings and provide additional crossings as required to meet user needs 	-	Y	-	-	Y		
Minimized potential risk of soil erosion, reduced ambient dust levels, impairment of aesthetics	<ul style="list-style-type: none"> At Pump house surroundings, identification of locations which require landscaping, tree planting, formation of pavements and include them in the design; Provisions for painting and upgrading of existing buildings wherever 	Y	Y	Y	Y	Y		
Poor maintenance of mechanical and electrical equipment	<ul style="list-style-type: none"> At pump house new equipment, training to be provided as a supporting item at the time of procuring the mechanical and electrical equipment. 	Y	Y	Y	Y	Y		
Supply of POPs	<ul style="list-style-type: none"> No electrical equipment can (transformers) be supplied with PCB insulation. 	Y	-	Y	Y	-		

Subject	EMP Requirement	Compliance Attained					Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
		ABISRP-01	ABISRP-02	ABISRP-03.1	ABISRP-03.2	ABISRP-04		
Lack of application of the EMP	• EMMP to be included as a Special Conditions in the Bid Document'	Y	Y	Y	Y	Y		
	• EMMP to be attached to contract to form part of the contract requirements.	Y	Y	Y	Y	Y		
Inability to meet full irrigation demand and operation	• At Pumps, canals, drains, and demonstration farms design considering full irrigation water demand and drainage requirements and adhering to the construction regulations of International Best Practices and of GOU.	Y	Y	Y	Y	Y		
Selection of inappropriate contractors	• During bid evaluation Prepare evaluation checklist to compare contractors. Use this to select the best contractor	Y	Y	Y	Y	Y		

Y: Yes; N: No; P: Partial

Table 17. Implementation Status of EMP during the construction period (Packages ABISRP-01, ABISRP-02, ABISRP- 03.1, ABISRP-03.2 and ABISRP-04)

<i>Subject</i>	<i>EMP Requirement</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>
ABISRP-01				
Awareness campaign	<ul style="list-style-type: none"> Undertake a public awareness campaign to create awareness among farmers of the construction work plan and possible impacts on irrigation delivery. 	Yes		
Introduction of contractor to the site.	<ul style="list-style-type: none"> EMP explained to contractor on-site before any work commences. 	Yes		
	<ul style="list-style-type: none"> Approve the commencement of work only after the contractor understands the EMP 	Partial	SEMP not completed since (26/12/2019 - Open)	Finalize SEMP
Removal of trees in construction sites	<ul style="list-style-type: none"> Any trees that need to be removed can only be removed after the PNPC/ Hokimiyat has approved their removal. 	Yes		
Site preparation	<ul style="list-style-type: none"> Minimize land clearing and excavation areas, preserving existing ground cover wherever possible, and providing approved ground cover where necessary; plant trees, bushes/grass to minimize rainwater runoff; appropriate stabilizing techniques to prevent cave-ins or earth-slips in excavated areas. 	Yes		
	<ul style="list-style-type: none"> Constructing buildings and facilities following the land protection activities stipulated in Construction Norms and Regulations (CNR) 3.01.01-97 and CNR 3.05.03-97. 	Yes		
Excavation of sites and opening of borrow pits	<ul style="list-style-type: none"> Use borrow material from sides of canals that has been dumped after excavation/ de-silting. 	Yes		
	<ul style="list-style-type: none"> If borrow pits essential. to be approved by PNPC and Ministry of Geology 	Yes		
	<ul style="list-style-type: none"> Borrow pits to be closed and landscaped. 	-		
	<ul style="list-style-type: none"> Stockpile excavated materials alongside open trench for backfilling; use for road formation 	Yes		
	<ul style="list-style-type: none"> Replace excavated material and landscape the area. 	Yes		
	<ul style="list-style-type: none"> Remove all waste and unused pipes. 	Yes		
Rehabilitation activities during cropping season	<ul style="list-style-type: none"> Undertake pump station construction, rehabilitation planning and arranging to supply the minimum water requirements. 	Yes		
	<ul style="list-style-type: none"> Provide water by-pass structures along canal wherever feasible, e.g., provide a detour channel connecting the intake canal to the existing intake chamber behind the rehabilitation site during installation of new pumps 	Yes		

Subject	EMP Requirement	Compliance Attained	Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
	(proposed site) to continue uninterrupted supply of irrigation			
Removal and disposal of debris	• Debris to be dumped in land fill sites approved by Oblast Gospropridom & Hokimiyat	-	No debris produced	
	• Sell metal-based scrap and equipment to scrap dealers in Alat and Bukhara;	-	No metal waste produced.	
	• Land fill sites to be closed and rehabilitated	-	Works not completed yet	
	• Old rising main pipes to be removed and disposed or recycled	-	No rising mains	
	• Any electrical equipment found to contain PCBs is to be disposed of in accordance with Gozecoexpertisa requirements:	-	No electrical equipment	
Storage and Handling of construction materials, fuel and lubricants	• Prepare material/equipment storage areas with facilities not to impair air quality nor contaminate soil or water and placed about 20 m away from water sources at elevated areas without interfering with drainage pattern	Yes		
	• Bund fuel tank storages to 110% of tank capacity. Refuel vehicles and equipment 20 m away from water courses	Yes		
	• Dispose of used oil and oil filters to meet accepted industry procedures	Yes		
	• Accidental spill handling action (contingency) plan	Yes		
Noise from construction equipment; e.g. jack hammers, air compressors	• Equipment fitted with approved sound suppression equipment and maintained	Yes		
	• Operators provided with ear protection	Yes		
	• Limit activities to daylight hours	Yes		
Dust	• contractor to provide water tanker or necessary provisions	Yes		
	• contractor to spray water on work areas and roads as required	Yes		
Worker Health and Safety	• Contractor to implement workplace safety awareness program.	Yes		
	• Workers to be provided with safety equipment and instructed in its use.	Yes		
	• Emergency accident -contingency plan	Yes		
Solid and liquid waste management	• All solid waste collected in containers for safe temporary storage and weekly dispose to safe dumping areas approved by the PE and PNPC	Yes		

Subject	EMP Requirement	Compliance Attained	Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
Transport of equipment and material in existing roads	• If local roads are used, select routes based on the truck load; divide the load to prevent damages to local roads and bridges; observe speed limits and maintain in the good condition; transport material under cover; avoid peak hours in roads with moderate to high traffic.	Yes		
	• Contractor attends to repair all damaged infrastructure/ roads, if needed. with relevant authorities (Hokimiyat);	Yes		
Rehabilitation and closing of construction sites	• Remove all waste and contaminated soil	-	Works not completed yet	
	• Restore sites by replacing topsoil and re-vegetating area	-	Works not completed yet	
	• Final payment may be withheld until work is completed	-	Works not completed yet	
Inspection and acceptance of construction works before handing over	• Inspection and signed acceptance by Operating Personnel	-	Works not completed yet	
ABISRP-02				
Awareness campaign	• Undertake a public awareness campaign to create awareness among farmers of the construction work plan and possible impacts on irrigation delivery.	Yes		
Introduction of contractor to the site.	• EMP explained to contractor on-site before any work commences.	Yes		
	• Approve the commencement of work only after the contractor understands the EMP	Partial	EMR prepared per two months (18/07/18 – Open)	Prepare and submit EMR monthly
Removal of trees in construction sites	• Any trees that need to be removed can only be removed after the PNPC/ Hokimiyat has approved their removal.	Yes		
Site preparation	• Minimize land clearing and excavation areas, preserving existing ground cover wherever possible, and providing approved ground cover where necessary; plant trees, bushes/grass to minimize rainwater runoff; appropriate stabilizing techniques to prevent cave-ins or earth-slips in excavated areas.	Yes		
	• Constructing buildings and facilities following the land protection activities stipulated in Construction Norms and Regulations (CNR) 3.01.01-97 and CNR 3.05.03-97.	Yes		
Excavation of sites and opening of borrow pits	• Use borrow material from sides of canals that has been dumped after excavation/ de-silting.	Yes		
	• If borrow pits essential. to be approved by PNPC and Ministry of Geology	Yes		

Subject	EMP Requirement	Compliance Attained	Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
	• Borrow pits to be closed and landscaped.	-		
	• Stockpile excavated materials alongside open trench for backfilling; use for road formation	Yes		
	• Replace excavated material and landscape the area.	Yes		
	• Remove all waste and unused pipes.	Yes		
Rehabilitation activities during cropping season	• Undertake pump station construction, rehabilitation planning and arranging to supply the minimum water requirements.	-		
	• Provide water by-pass structures along canal wherever feasible, e.g., provide a detour channel connecting the intake canal to the existing intake chamber behind the rehabilitation site during installation of new pumps (proposed site) to continue uninterrupted supply of irrigation	Yes		
Removal and disposal of debris	• Debris to be dumped in land fill sites approved by Oblast Gospropridom & Hokimiyat	Yes		
	• Sell metal-based scrap and equipment to scrap dealers in Alat and Bukhara;	Yes	Reused or sold by BISA	
	• Land fill sites to be closed and rehabilitated	Yes		
	• Old rising main pipes to be removed and disposed or recycled	-		
	• Any electrical equipment found to contain PCBs is to be disposed of in accordance with Gozecoexpertisa requirements:	-		
Storage and Handling of construction materials, fuel and lubricants	• Prepare material/equipment storage areas with facilities not to impair air quality nor contaminate soil or water and placed about 20 m away from water sources at elevated areas without interfering with drainage pattern	Yes		
	• Bund fuel tank storages to 110% of tank capacity. Refuel vehicles and equipment 20 m away from water courses	Yes		
	• Dispose of used oil and oil filters to meet accepted industry procedures	No	Record of old tires and accumulators have not been kept. (19/01/18 – 22/06/19)	Provide the necessary data
	• Accidental spill handling action (contingency) plan	Yes		
Noise from construction equipment; e.g.	• Equipment fitted with approved sound suppression equipment and maintained	No	Not required	
	• Operators provided with ear protection	Yes		
	• Limit activities to daylight hours	Yes		

Subject	EMP Requirement	Compliance Attained	Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
jack hammers, air compressors				
Dust	• contractor to provide water tanker or necessary provisions	Yes		
	• contractor to spray water on work areas and roads as required	Yes		
Worker Health and Safety	• Contractor to implement workplace safety awareness program.	Yes		
	• Workers to be provided with safety equipment and instructed in its use.	No	Labeling doesn't exist for hazardous areas (19/08/17 – 22/06/19)	Apply labelling.
			Hygienic conditions, protection against climatological conditions and light conditions poor (19/01/18 – 22/06/19)	Comply with contract requirements for working accomodation and working sites.
			Firefighting equipment or fire extinguisher doesn't exist (19/01/18 – 22/06/19)	Comply with contract requirements for safety.
			PPE not used by the staff at Kharkhur Construction Site (21/06/19 – 28/12/19)	Daily check, and immediate cautions to the Contractor by the Supervisor.
	• Emergency accident -contingency plan	Yes		
Solid and liquid waste management	• All solid waste collected in containers for safe temporary storage and weekly dispose to safe dumping areas approved by the PE and PNPC	No	Sewage not disposed properly (19/01/18 – 22/06/19)	To comply with the national legislation and contract requirements for sewage disposal.
			Hazardous waste collection area doesn't exist (19/01/18 – 26/01/18)	Provide the hazardous waste collection spot.
			Separation of hazardous and solid waste not applied (19/01/18 – 22/06/19)	Sort solid waste separately.
Transport of equipment and material in existing roads	• If local roads are used, select routes based on the truck load; divide the load to prevent damages to local roads and bridges; observe speed limits and maintain in the good condition; transport material under cover; avoid peak hours in roads with moderate to high traffic.	Yes		

Subject	EMP Requirement	Compliance Attained	Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
	• Contractor attends to repair all damaged infrastructure/ roads, if needed. with relevant authorities (Hokimiyat);	Yes		
Rehabilitation and closing of construction sites	• Remove all waste and contaminated soil	Partial	Soil contamination with oil leakage (19/01/18 – 22/06/19)	Clean the leakage areas
	• Restore sites by replacing topsoil and re-vegetating area	Partial	For the sites completed top soil laid and vegetated.	
	• Final payment may be withheld until work is completed	Yes		
Inspection and acceptance of construction works before handing over	• Inspection and signed acceptance by Operating Personnel	-	Works have not been completed yet.	
ABISRP-03.1				
Awareness campaign	• Undertake a public awareness campaign to create awareness among farmers of the construction work plan and possible impacts on irrigation delivery.	Yes		
Introduction of contractor to the site.	• EMP explained to contractor on-site before any work commences.	Yes		
	• Approve the commencement of work only after the contractor understands the EMP	Partial	Environmental expert has not been hired (26/11/17 – 14/02/18)	Hire the national environmental expert
			SEMP has not been prepared (26/11/17 – 14/12/17)	Prepare and submit SEMP
			Environmental Record System has not been established. (26/11/2017 – 14/05/18)	Establish the environmental recording system and record the environmental monitoring activities.
			Grievance Redress Mechanism is not established (26/11/17 – 14/05/18)	Establish the GRM and log books
			The replacement of Environmental Manager has not been declared (18/12/18 – 04/02/19)	Inform PIU/SC for replacement

<i>Subject</i>	<i>EMP Requirement</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>
			EMR has not been submitted regularly (31/12/18 – 15/01/19)	Submit all previous EMR's and next EMRs regularly.
Removal of trees in construction sites	<ul style="list-style-type: none"> Any trees that need to be removed can only be removed after the PNPC/ Hokimiyat has approved their removal. 	Yes		
Site preparation	<ul style="list-style-type: none"> Minimize land clearing and excavation areas, preserving existing ground cover wherever possible, and providing approved ground cover where necessary; plant trees, bushes/grass to minimize rainwater runoff; appropriate stabilizing techniques to prevent cave-ins or earth-slips in excavated areas. 	Yes		
	<ul style="list-style-type: none"> Constructing buildings and facilities following the land protection activities stipulated in Construction Norms and Regulations (CNR) 3.01.01-97 and CNR 3.05.03-97. 	Yes		
Excavation of sites and opening of borrow pits	<ul style="list-style-type: none"> Use borrow material from sides of canals that has been dumped after excavation/ de-silting. 	Yes		
	<ul style="list-style-type: none"> If borrow pits essential. to be approved by PNPC and Ministry of Geology 	Yes		
	<ul style="list-style-type: none"> Borrow pits to be closed and landscaped. 	-		
	<ul style="list-style-type: none"> Stockpile excavated materials alongside open trench for backfilling; use for road formation 	Yes		
	<ul style="list-style-type: none"> Replace excavated material and landscape the area. 	Yes		
	<ul style="list-style-type: none"> Remove all waste and unused pipes. 	Yes		
Rehabilitation activities during cropping season	<ul style="list-style-type: none"> Undertake pump station construction, rehabilitation planning and arranging to supply the minimum water requirements. 	-		
	<ul style="list-style-type: none"> Provide water by-pass structures along canal wherever feasible, e.g., provide a detour channel connecting the intake canal to the existing intake chamber behind the rehabilitation site during installation of new pumps (proposed site) to continue uninterrupted supply of irrigation 	Yes		
Removal and disposal of debris	<ul style="list-style-type: none"> Debris to be dumped in land fill sites approved by Oblast Gospropridom & Hokimiyat 	Yes		
	<ul style="list-style-type: none"> Sell metal-based scrap and equipment to scrap dealers in Alat and Bukhara; 	Yes	Reused or sold by BISA	
	<ul style="list-style-type: none"> Land fill sites to be closed and rehabilitated 	No	Dredged material storage area left without leveling	Level and plant the disposal site

Subject	EMP Requirement	Compliance Attained	Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
			(GTS of Contract Chapter 11 Article 11.12) and planting as defined in the Permission (18/06/19 – Open)	
	• Old rising main pipes to be removed and disposed or recycled	-		
	• Any electrical equipment found to contain PCBs is to be disposed of in accordance with Gozecoexpertisa requirements:	-		
Storage and Handling of construction materials, fuel and lubricants	• Prepare material/equipment storage areas with facilities not to impair air quality nor contaminate soil or water and placed about 20 m away from water sources at elevated areas without interfering with drainage pattern	Partial	Hazardous material/waste storage area are not constructed according to standards (18/06/19 – 28/09/19)	Hazardous material/waste storage shall be re-constructed according to the standards.
	• Bund fuel tank storages to 110% of tank capacity. Refuel vehicles and equipment 20 m away from water courses	Yes		
	• Dispose of used oil and oil filters to meet accepted industry procedures	Yes		
	• Accidental spill handling action (contingency) plan	Yes		
Noise from construction equipment; e.g. jack hammers, air compressors	• Equipment fitted with approved sound suppression equipment and maintained	Yes		
	• Operators provided with ear protection	Yes		
	• Limit activities to daylight hours	Yes		
Dust	• Contractor to provide water tanker or necessary provisions	Yes		
	• contractor to spray water on work areas and roads as required	Yes		
Worker Health and Safety	• Contractor to implement workplace safety awareness program.	Partial	Smoke has been formed in the welding area (18/06/19 – 28/09/19)	Ventilation shall be provided in welding area
	• Workers to be provided with safety equipment and instructed in its use.	Yes		
	• Emergency accident -contingency plan	Yes	Safety measures properly not applied (28/12/19 – 10/01/20)	Conduct additional health and safety training for the staff.

Subject	EMP Requirement	Compliance Attained	Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
Solid and liquid waste management	<ul style="list-style-type: none"> All solid waste collected in containers for safe temporary storage and weekly dispose to safe dumping areas approved by the PE and PNPC 	Partial	Hazardous wastes observed at site (17/12/18 – 18/06/19)	Follow the rules stated in Hazardous Waste Management Plan, regularly check the site
			The permission for the disposal site of the dredged material has not been obtained (18/12/18 – 22/04/19)	Obtain the permission
			Solid waste disposal records not kept regularly (28/12/19 – 10/01/20)	Keep the record regularly
			Hazardous solid waste collection and separation not active (28/12/19 – 10/01/20)	Put in progress again hazardous solid waste collection and separation
Transport of equipment and material in existing roads	<ul style="list-style-type: none"> If local roads are used, select routes based on the truck load; divide the load to prevent damages to local roads and bridges; observe speed limits and maintain in the good condition; transport material under cover; avoid peak hours in roads with moderate to high traffic. 	Yes		
	<ul style="list-style-type: none"> Contractor attends to repair all damaged infrastructure/ roads, if needed. with relevant authorities (Hokimiyat); 	Yes		
Rehabilitation and closing of construction sites	<ul style="list-style-type: none"> Remove all waste and contaminated soil 	Yes		
	<ul style="list-style-type: none"> Restore sites by replacing topsoil and re-vegetating area 	Yes		
	<ul style="list-style-type: none"> Final payment may be withheld until work is completed 	Yes		
Inspection and acceptance of construction works before handing over	<ul style="list-style-type: none"> Inspection and signed acceptance by Operating Personnel 	Yes		
ABISRP-03.2				
Awareness campaign	<ul style="list-style-type: none"> Undertake a public awareness campaign to create awareness among farmers of the construction work plan and possible impacts on irrigation delivery. 	Yes		
	<ul style="list-style-type: none"> EMP explained to contractor on-site before any work commences. 	Yes		

Subject	EMP Requirement	Compliance Attained	Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
Introduction of contractor to the site.	<ul style="list-style-type: none"> • Approve the commencement of work only after the contractor understands the EMP 	Yes	Environmental expert has not been hired (26/11/17 – 14/02/18)	Hire the national environmental expert
			SEMP has not been prepared (26/11/17 – 14/12/17)	Prepare and submit SEMP
			Environmental Record System has not been established. (26/11/2017 – 14/05/18)	Establish the environmental recording system and record the environmental monitoring activities.
			Grievance Redress Mechanism is not established (26/11/17 – 14/05/18)	Establish the GRM and log books
			The replacement of Environmental Manager has not been declared (18/12/18 – 04/02/19)	Inform PIU/SC for replacement
			EMR has not been submitted regularly (31/12/18 – 15/01/19)	Submit all previous EMR's and next EMRs regularly.
Removal of trees in construction sites	<ul style="list-style-type: none"> • Any trees that need to be removed can only be removed after the PNPC/ Hokimiyat has approved their removal. 	Yes		
Site preparation	<ul style="list-style-type: none"> • Minimize land clearing and excavation areas, preserving existing ground cover wherever possible, and providing approved ground cover where necessary; plant trees, bushes/grass to minimize rainwater runoff; appropriate stabilizing techniques to prevent cave-ins or earth-slips in excavated areas. 	Yes		
	<ul style="list-style-type: none"> • Constructing buildings and facilities following the land protection activities stipulated in Construction Norms and Regulations (CNR) 3.01.01-97 and CNR 3.05.03-97. 	Yes		
Excavation of sites and opening of borrow pits	<ul style="list-style-type: none"> • Use borrow material from sides of canals that has been dumped after excavation/ de-silting. 	Yes		
	<ul style="list-style-type: none"> • If borrow pits essential. to be approved by PNPC and Ministry of Geology 	Yes		
	<ul style="list-style-type: none"> • Borrow pits to be closed and landscaped. 	-		

<i>Subject</i>	<i>EMP Requirement</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>
	• Stockpile excavated materials alongside open trench for backfilling; use for road formation	Yes		
	• Replace excavated material and landscape the area.	Yes		
	• Remove all waste and unused pipes.	Yes		
Rehabilitation activities during cropping season	• Undertake pump station construction, rehabilitation planning and arranging to supply the minimum water requirements.	-		
	• Provide water by-pass structures along canal wherever feasible, e.g., provide a detour channel connecting the intake canal to the existing intake chamber behind the rehabilitation site during installation of new pumps (proposed site) to continue uninterrupted supply of irrigation	Yes		
Removal and disposal of debris	• Debris to be dumped in land fill sites approved by Oblast Gospropridom & Hokimiyat	Partial	Demolished concrete left in site (27/12/19 – 10/01/20)	Dispose the demolished waste to a site shown by the authorities
	• Sell metal-based scrap and equipment to scrap dealers in Alat and Bukhara;	Yes	Reused or sold by BISA	
	• Land fill sites to be closed and rehabilitated	Yes	Dredged material storage area left without leveling (GTS of Contract Chapter 11 Article 11.12) and planting as defined in the Permission (17/06/19 – Open)	Level and plant the disposal site
	• Old rising main pipes to be removed and disposed or recycled	-		
	• Any electrical equipment found to contain PCBs is to be disposed of in accordance with Gozecoexpertisa requirements:	-		
Storage and Handling of construction materials, fuel and lubricants	• Prepare material/equipment storage areas with facilities not to impair air quality nor contaminate soil or water and placed about 20 m away from water sources at elevated areas without interfering with drainage pattern	Yes		
	• Bund fuel tank storages to 110% of tank capacity. Refuel vehicles and equipment 20 m away from water courses	Yes		
	• Dispose of used oil and oil filters to meet accepted industry procedures	Yes		
	• Accidental spill handling action (contingency) plan	Yes		

Subject	EMP Requirement	Compliance Attained	Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
Noise from construction equipment; e.g. jack hammers, air compressors	• Equipment fitted with approved sound suppression equipment and maintained	Yes		
	• Operators provided with ear protection	Yes		
	• Limit activities to daylight hours	Yes		
Dust	• contractor to provide water tanker or necessary provisions	Yes		
	• contractor to spray water on work areas and roads as required	Partial	The dust formation has been observed at unpaved roads (17/12/18 – 17/06/19)	Spray the unpaved roads with water and regularly check the site
Worker Health and Safety	• Contractor to implement workplace safety awareness program.	Partial	Health and safety training records not kept regularly (27/12/19 – 10/01/20)	Keep the record regularly
	• Workers to be provided with safety equipment and instructed in its use.	Yes	Some fire extinguishers' expiration date passed (27/12/19 – 10/01/20)	Replace the fire extinguishers which are expired
	• Emergency accident -contingency plan	Yes		
Solid and liquid waste management	• All solid waste collected in containers for safe temporary storage and weekly dispose to safe dumping areas approved by the PE and PNPC	Yes	The permission for the disposal site of the dredged material has not been obtained (18/12/18 – 21/02/19)	Obtain the permission
			Hazardous waste storage area doesn't exist (17/06/19 – 28/09/19)	Hazardous waste storage area shall be constructed
Transport of equipment and material in existing roads	• If local roads are used, select routes based on the truck load; divide the load to prevent damages to local roads and bridges; observe speed limits and maintain in the good condition; transport material under cover; avoid peak hours in roads with moderate to high traffic.	Yes		
	• Contractor attends to repair all damaged infrastructure/ roads, if needed. with relevant authorities (Hokimiyat);	Yes		
Rehabilitation and closing of construction sites	• Remove all waste and contaminated soil	Partial	Oil Spills observed at site (17/12/18 – 17/06/19)	Clean and regularly check the site
	• Restore sites by replacing topsoil and re-vegetating area	Yes		
	• Final payment may be withheld until work is completed	Yes		
Inspection and acceptance of	• Inspection and signed acceptance by Operating Personnel	Yes		

<i>Subject</i>	<i>EMP Requirement</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>
construction works before handing over				
ABISRP-04				
Awareness campaign	<ul style="list-style-type: none"> Undertake a public awareness campaign to create awareness among farmers of the construction work plan and possible impacts on irrigation delivery. 	Yes		
Introduction of contractor to the site.	<ul style="list-style-type: none"> EMP explained to contractor on-site before any work commences. 	Yes		
	<ul style="list-style-type: none"> Approve the commencement of work only after the contractor understands the EMP 	Yes		
Removal of trees in construction sites	<ul style="list-style-type: none"> Any trees that need to be removed can only be removed after the PNPC/ Hokimiyat has approved their removal. 	Yes		
Site preparation	<ul style="list-style-type: none"> Minimize land clearing and excavation areas, preserving existing ground cover wherever possible, and providing approved ground cover where necessary; plant trees, bushes/grass to minimize rainwater runoff; appropriate stabilizing techniques to prevent cave-ins or earth-slips in excavated areas. 	Yes		
	<ul style="list-style-type: none"> Constructing buildings and facilities following the land protection activities stipulated in Construction Norms and Regulations (CNR) 3.01.01-97 and CNR 3.05.03-97. 	Yes		
Excavation of sites and opening of borrow pits	<ul style="list-style-type: none"> Use borrow material from sides of canals that has been dumped after excavation/ de-silting. 	Yes		
	<ul style="list-style-type: none"> If borrow pits essential. to be approved by PNPC and Ministry of Geology 	Yes		
	<ul style="list-style-type: none"> Borrow pits to be closed and landscaped. 	-		
	<ul style="list-style-type: none"> Stockpile excavated materials alongside open trench for backfilling; use for road formation 	Yes		
	<ul style="list-style-type: none"> Replace excavated material and landscape the area. 	Yes		
	<ul style="list-style-type: none"> Remove all waste and unused pipes. 	Yes		
Rehabilitation activities during cropping season	<ul style="list-style-type: none"> Undertake pump station construction, rehabilitation planning and arranging to supply the minimum water requirements. 	-		
	<ul style="list-style-type: none"> Provide water by-pass structures along canal wherever feasible, e.g., provide a detour channel connecting the intake canal to the existing intake chamber behind the rehabilitation site during installation of new pumps 	Yes		

Subject	EMP Requirement	Compliance Attained	Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
	(proposed site) to continue uninterrupted supply of irrigation			
Removal and disposal of debris	• Debris to be dumped in land fill sites approved by Oblast Gospropridom & Hokimiyat	Yes		
	• Sell metal-based scrap and equipment to scrap dealers in Alat and Bukhara;	Yes	Reused or sold by BISA	
	• Land fill sites to be closed and rehabilitated	Yes		
	• Old rising main pipes to be removed and disposed or recycled	-		
	• Any electrical equipment found to contain PCBs is to be disposed of in accordance with Gozecoexpertisa requirements:	-		
Storage and Handling of construction materials, fuel and lubricants	• Prepare material/equipment storage areas with facilities not to impair air quality nor contaminate soil or water and placed about 20 m away from water sources at elevated areas without interfering with drainage pattern	Yes		
	• Bund fuel tank storages to 110% of tank capacity. Refuel vehicles and equipment 20 m away from water courses	Yes		
	• Dispose of used oil and oil filters to meet accepted industry procedures	Yes		
	• Accidental spill handling action (contingency) plan	Yes		
Noise from construction equipment; e.g. jack hammers, air compressors	• Equipment fitted with approved sound suppression equipment and maintained	No	Not required	
	• Operators provided with ear protection	Yes		
	• Limit activities to daylight hours	Yes		
Dust	• contractor to provide water tanker or necessary provisions	Yes		
	• contractor to spray water on work areas and roads as required	Yes		
Worker Health and Safety	• Contractor to implement workplace safety awareness program.	Yes		
	• Workers to be provided with safety equipment and instructed in its use.	Yes		
	• Emergency accident -contingency plan	Yes		
Solid and liquid waste management	• All solid waste collected in containers for safe temporary storage and weekly dispose to safe dumping areas approved by the PE and PNPC	Yes		

Subject	EMP Requirement	Compliance Attained	Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
Transport of equipment and material in existing roads	• If local roads are used, select routes based on the truck load; divide the load to prevent damages to local roads and bridges; observe speed limits and maintain in the good condition; transport material under cover; avoid peak hours in roads with moderate to high traffic.	Yes		
	• Contractor attends to repair all damaged infrastructure/ roads, if needed. with relevant authorities (Hokimiyat);	Yes		
Rehabilitation and closing of construction sites	• Remove all waste and contaminated soil	Yes		
	• Restore sites by replacing topsoil and re-vegetating area	Yes		
	• Final payment may be withheld until work is completed	Yes		
Inspection and acceptance of construction works before handing over	• Inspection and signed acceptance by Operating Personnel	Yes		

5 FUNCTIONING OF THE SEMP

5.1 EMP Review

111. The fourth revision of SEMP about the Amu Bukhara 1 New Pump Station (ABISRP 01) have been submitted on 21/April/2020. The comments have been provided to the contractor to revise and submit the final SEMP as soon as possible on 22/April/2020. But at the reporting period no reply has been received from the contractor. The contractor does not pay any attention to the Engineers repetitive requests.
112. Amu Bukhara Main Canal Regulating Structure (ABISRP 02) Contractor has submitted the SEMP just to fulfil its administrative obligations. However, the contractor acts as unaware of existence of SEMP which has been submitted third revision on 24th January 2017 and has received conditionally no objection on date 20th December 2016) and does not submit EMR accordingly. Unfortunately, repetitive cautions have not cared by the Amu Bukhara Main Canal Regulating Structure (ABISRP 02) Contractor.
113. Currently SEMP of Modernization and Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03.1) (14th February 2018 is submission date of third revision and 20th February 2018 no objection date) and Modernization and Rehabilitation of Kizil Tepa Pump Station (ABISRP 03.2) (14th February 2018 is submission date of third revision and 20th February 2018 no objection date) considered to fit the environmental requirements of the construction activities. No revisions required on the existing SEMP of Kuyu Mazar Pump Station (ABISRP 03.1) and SEMP of Kizil Tepa Pump Station (ABISRP 03.2) due to construction activities.
114. As indicated at paragraph 102, 103 and 106 Health and Safety Plans have been issued considering COVID-19 risk assessment and control measures by Amu Bukhara 1 New Pump Station (ABISRP 01); Kuyu Mazar Pump Station (ABISRP 03.1); and Kizil Tepa Pump Station (ABISRP 03.2) contractors.

5.2 Grievance Redress Mechanism

115. No complaints received during the reporting period.

6 GOOD PRACTICE AND OPPORTUNITY FOR IMPROVEMENT

6.1 Good Practice

116. There is not any issue to be reported as good practice note.

6.2 Opportunities for Improvement

117. After the designation of the environmental staff by the Amu Bukhara 1 New Pump Station (ABISRP 01) Contractor a training program is proposed to be conducted by SC. The subject of the training program will cover environmental, occupational health and safety trainings of the contractor's staff, monitoring, recording, and reporting responsibilities of the contractor.

7 SUMMARY AND RECOMMENDATIONS

7.1 Summary

118. During the current reporting period (1st July 2020- 31st December 2020) the following environmental safeguard activities have been performed:

- Organization of health and safety measures related to COVID-19 by PIU supervision team and contractors.
- Routine daily site visits by Site Engineers of Supervision Consultant including environmental, occupational health and safety issues.

119. Contractor to update H&S Plans have been issued with COVID-19 risk assessment and relevant mitigation measures.

120. The issues identified during this monitoring period is summarized in **Table 18**.

Table 18. Issues Identified During the Monitoring Period

Issue	Required Action	Responsibility	Timing (Target Dates)
Information from the SAEMRs has never been disclosed to affected persons since the project became effective. (Pending since the last monitoring period)	PMU will disclose the SAEMR in local language at PMUs web site	PMU	31/03/21 ²
Waste and contaminated soil are not removed at closed construction site.	Clean the leakage areas and dispose the contaminated soil at designated disposal site.	Contractor (ABISRP 02)	31/03/21
Topsoil and re-vegetation are not provided at closed construction site.	Restore sites by replacing topsoil and re-vegetating area	Contractor (ABISRP 02)	31/03/21
ABISRP. 02 Contractor does not publish a public notice regarding the nature and location of the project.	The Contractor shall publish a public notice regarding the nature and location of the project for prospective construction areas.	Contractor (ABISRP 02)	31/03/21
ABISRP. 02 Contractor did not define Safety Officer.	The Contractor shall defined Safety Officer.	Contractor (ABISRP 02)	31/01/21
ABISRP. 02 Contractor does not provide noise prevention measures for staff using noisy equipment, vehicles.	The contractor shall provide noise prevention measures.	Contractor (ABISRP 02)	31/01/21
The working activities of contractor has not been limited by daylight hours.	Obtain necessary working permission from local authorities.	Contractor (ABISRP 01 ABISRP 03.1 ABISRP 03.2)	Immediately
ABISRP. 02 Contractor has not trained any person for the first aid	Train a staff for the first aid	Contractor (ABISRP 02)	31/01/21
ABISRP. 02 Contractor does not check the health of the staff regularly and keep health record.	Provide the regular health check of the staff and keep their records.	Contractor (ABISRP 02)	Immediately
ABISRP. 02 Contractor does not have adequate fire protection measures, first aid kit and safety equipment	Provide adequate fire protection measures, first aid kit and safety equipment.	Contractor (ABISRP 02)	31/01/21

² The target date has been set during the preparation period of the report based on comments.

ABISRP. 02 Contractor does not have fencing in order to protect intrusion	Provide fencing in order to protect intrusion, wherever necessary.	Contractor (ABISRP 02)	31/03/21
Flow amount of water in channels, Irrigated Area (ha) Amount of water used for irrigation purposes, Water quality of irrigation water (pH, salinity, hardness, BOD, COD, Nitrate, Nitrite, Ammonium, Phosphate, Pesticides, Oil products, phenol) in the project area, Soil quality/pollution (SOM) (humus), soil carbon, mobile and gross NPK, nitrates, nitrites, ammonium, phosphate, pesticides)Water levels of wells in the irrigated areas, , Amount of water used for irrigation purposes, Electricity Consumed before the project by pumping, Electricity Consumed after the project by pumping, Water quantity pumped before rehabilitation/reconstruction, Water quantity pumped after rehabilitation/reconstruction has not been monitored.	Monitor all parameters	BISA/WCA, PIU, HGMEs, Uzhydromet	31/03/21
The contractor (ABISRP 01) has been conducting civil works since 2019, without finalizing SSEMP including contingency plan. (Pending since the last monitoring period)	Finalize the SSEMP and obtain approval	Contractor (ABISRP 01) ³	28/02/21
PMU and the supervision consultant allowed the contractor (ABISRP 01) to commence the civil works without approving the SSEMP. (Pending since the last monitoring period)	Review and approve the SSEMP	PMU and Supervision Consultant	31/03/21 ⁴
EMR of the Contractor not prepared (Pending since the last monitoring period)	Prepare EMP	Contractor (ABISRP 02) ⁵	31/03/21
Semi-annual EMR R.08.P. 39 at ABISRP 03.01 Kuyu Mazar Construction Site dredged material storage area left without levelling (GTS Chapter 11 Article 11.12) and planting as defined in the and Environmental Permission. (Pending since the last monitoring period)	Level the area and plant.	Contractor (ABISRP 03) ⁶	31/03/21 ⁷
Semi-annual EMR R.08.P. 40 at ABISRP 03.02 Kizil Tepa Construction Site dredged material storage area left without levelling (GTS Chapter 11 Article 11.12) and Environmental Permission. (Pending since the last monitoring period)	Level the area and plant.	Contractor (ABISRP 03)	31/03/21 ⁸
Contractor to continue implementing anti-COVID-19 measures.	To conduct daily inspections and testing of workers' temperature, conduct trainings and reporting.	Contractor (ABISRP 03)	Q1 & Q2 2021
Hazardous material/waste storage area are not constructed according to standards	Reconstruct hazardous material/waste storage according to the standards.	Contractor (ABISRP 03)	31/03/21
Smoke has been formed in the welding area	Provide ventilation in welding area	Contractor (ABISRP 03)	31/03/21
Hazardous wastes observed at site. The permission for the disposal site of the dredged material has not been obtained. Solid waste disposal records not kept regularly. Hazardous solid waste collection and separation not active.	Follow the rules stated in Hazardous Waste Management Plan, regularly check the site Obtain the permission Keep the record regularly Put in progress again hazardous solid waste collection and separation	Contractor (ABISRP 03-1)	31/03/21

³ Construction of Amu Bukhara 1 New Pump Station

⁴ The target date has been readjusted with interview of Construction of Amu Bukhara 1 New Pump Station Contractor which was previously set as 31/01/20.

⁵ Modernization and Rehabilitation of Amu Bukhara Main Canal Regulating Structure

⁶ Rehabilitation of Kuyu Mazar and Kizil Tepa Pump Stations

⁷ The target date has been readjusted with interview of Modernization and Rehabilitation of Kuyu Mazar Pump Station Contractor which was previously set as 19/10/20.

⁸ The target date has been readjusted with interview of Modernization and Rehabilitation of Kizil Tepa Pump Station Contractor which was previously set as 19/10/20.

Demolished concrete left in site	Dispose the demolished waste to a site shown by the authorities	Contractor (ABISRP 03-2)	31/03/21
The dust formation has been observed at unpaved roads	Spray the unpaved roads with water and regularly check the site	Contractor (ABISRP 03-2)	31/03/21
Health and safety training records not kept regularly	Keep the record regularly	Contractor (ABISRP 03-2)	31/03/21
Oil Spills observed at site	Clean and regularly check the site	Contractor (ABISRP 03-2)	31/01/21

EMR = environmental monitoring report, SSEMP = site-specific environmental management plan

7.2 Recommendations

121. Conduct environmental audit by SC on Site environmental and health and safety conditions of the Contractor ABISRP 01, ABISRP 02, ABISRP 03.01 and 02 sites till the end of next reporting period.
122. The Contractor of Modernization and Rehabilitation of Kuyu Mazar Pumping Station (ABISRP 03.1) shall leave the disposal site of the dredged material as "levelled and planted" which is defined in the permission obtained from the Novai Ecology and Environmental Protection Headquarter on 21st February 2019. The levelling of the disposal site is part of the contract which is defined at Article 11.12 of Chapter 11 on Architecture and Landscaping. Planting of this site is an issue to be resettled with the Novai Ecology and Environmental Protection Headquarter. Since the priority of this issue compared to the completion of work is less therefore the deadline of the implementation is agreed as 19th September 2020. The deadline has been postponed due to the ongoing works at the site till the end of completion of construction works.
123. Amu Bukhara 1 New Pump Station (ABISRP 01) construction site contractor has not monitored the noise levels, the non-conformance notice will be issued within the following reporting period.
124. The Contractor of Amu Bukhara 1 New Pump Station (ABISRP 01) has not kept disposals records of garbage. This record will be required from the contractor with a non-conformance notice during the next reporting period.
125. The Contractor of Modernization and Rehabilitation of Kizil Tepa Pumping Station (ABISRP 03.2) shall leave the disposal site of the dredged material as "levelled and planted" which is defined in the permission obtained from the Bukhara Ecology and Environmental Protection Headquarter on 22nd April 2019. The levelling of the disposal site is part of the contract which is defined at Article 11.12 of Chapter 11 on Architecture and Landscaping has been performed by the contractor. Planting of this site is an issue to be resettled with the Bukhara Ecology and Environmental Protection Headquarter. Since the priority of this issue compared to the completion of work is less therefore the deadline of the implementation is agreed as 19th September 2020. The deadline has been postponed due to the ongoing works at the site till the end of completion of construction works.
126. Implementation of time-bound corrective action plan actions overdue. According to the draft environmental monitoring report (EMR) for Jul-Dec 2020, some corrective actions proposed by the previous EMR for Jan-Jun 2020 (levelling and planting of soil areas and SSEMP preparation) were not implemented as of 31 December 2020. The status will be informed by the next EMR for Jan-Jun 2021.
127. It has been requested from China National Technical Import & Export Corporation (CNTIC) to finalize the SEMP of Amu Bukhara 1 New Pump Station (ABISRP 01) until 31/January/2020, which could not be realized. Finalization of SEMP becomes an urgent issue.
128. PPE usage at the all-construction sites of Amu Bukhara Main Canal Regulating Structure (ABISRP 02) Contractor is an issue to be monitored regularly by SC and reported in next EMR report. This will be continuous monitoring activity.

ANNEX I - PERFORMANCE EVALUATION OF ENVIRONMENTAL MONITORING OF ABISRP

INDICATORS	Data Source	Frequency	Responsibility	Achievement from Commencement of Project Till end of Reporting Period (Yes(Y)/No(N)/Not Applicable(N/A))				
	How it will be measured?	How often it will be measured?	Who will measure it?	General	ABISRP 01	ABISRP 02	ABISRP 03	
							Lot 1	Lot 2
PRE-CONSTRUCTION PHASE								
Has the Consultant reviewed IEE?	By the activities of PIU Technical Assistance Team	Once in the initial phase of project.	EEC	Y	N/A	N/A	N/A	N/A
If the IEE has been updated has it been sent to the ADB for approval?	By the activities of PIU Technical Assistance Team	Once in the initial phase of project.	EEC	Y	N/A	N/A	N/A	N/A
Has the PIU submitted IEE assessment report for approval to the National Authorities?	By the activities of PIU Technical Assistance Team	Once in the initial phase of project.	PIU	Y	N/A	N/A	N/A	N/A
Has the Consultant included the EMP as a special Condition in the Bid Document?	By the activities of PIU Technical Assistance Team	Once in the initial phase of project.	PEC	Y	N/A	N/A	N/A	N/A
Has the Contractor designed adequate staff facilities in the pump house redesigns (water-seal toilets, furnished rest rooms, dining rooms, etc.)	By technical review	Once in the review of design documents	CEC	N/A	N/A	N/A	Y	Y
Does the Contractor's design include raised walking ways?	By technical review	Once in the review of design documents	CEC	N/A	N/A	N/A	Y	Y
Does the Contractor's design provide safety guards on the areas exposed to the machinery?	By technical review	Once in the review of design documents	MEC	N/A	N/A	N/A	Y	Y

INDICATORS	Data Source	Frequency	Responsibility	Achievement from Commencement of Project Till end of Reporting Period (Yes(Y)/No(N)/Not Applicable(N/A))				
	How it will be measured?	How often it will be measured?	Who will measure it?	General	ABISRP 01	ABISRP 02	ABISRP 03	
							Lot 1	Lot 2
Does the Contractor's design have any drainage facility to lower ground water?	By technical review	Once in the review of design documents	CEC	N/A	N/A	Y	Y	Y
Does the design meet the internationally acceptable safety standards of electricity for wet working areas?	By technical review	Once in the review of design documents	EIEC	N/A	N/A	Y	Y	Y
Does the design consider critical periods for biological life and adhere any avoidance plan?	By technical review	Once in the review of design documents	EEC	N/A	N/A	N/A	N/A	N/A
Does the Contractor have proper survey equipment?	By technical review	Once in the review of design documents	CEC	N/A	N/A	Y	Y	Y
Does the design ensure free access to the facilities and availability of roads to them for O&M?	By technical review	Once in the review of design documents	CEC	N/A	N/A	Y	Y	Y
Does the design take care the placement of building and facilities considering fire breaks?	By technical review	Once in the review of design documents	MEC	N/A	N/A	N/A	Y	Y
Does the design consider Corrosion protection of buildings by ground water?	By technical review	Once in the review of design documents	CEC	N/A	N/A	Y	Y	Y
Does the design care the fireproof materials where necessary?	By technical review	Once in the review of design documents	CEC	N/A	N/A	N/A	Y	Y
Has the Contractor checked the desilting efficiency of inlet canal design and desilting basins?	By technical review	Once in the review of design documents	CEC	N/A	N/A	Y	Y	Y
Has the Contractor developed inlet having sand trap and/or other alternative devices?	By technical review	Once in the review of design documents	CEC/MEC	N/A	N/A	Y	Y	Y

INDICATORS	Data Source	Frequency	Responsibility	Achievement from Commencement of Project Till end of Reporting Period (Yes(Y)/No(N)/Not Applicable(N/A))				
	How it will be measured?	How often it will be measured?	Who will measure it?	General	ABISRP 01	ABISRP 02	ABISRP 03	
							Lot 1	Lot 2
Does the design consider oil separators to have oil concentration less than 0.3 mg/l?	By technical review	Once in the review of design documents	CEC/MEC	N/A	N/A	N/A	Y	Y
Does the Contractor develop a Worker Safety Plan in compliance with Uzbekistan Labor Code?	By technical review	Once in the review of design documents	EEC	N/A	N/A	Y	Y	Y
Does the design consider protection measures for pipes laid in saline areas?	By technical review	Once in the review of design documents	MEC	N/A	N/A	N/A	N/A	N/A
Does the design consider safety conditions of crossing, bridges that will be used for transportation of vehicles, equipment, and staff?	By technical review	Once in the review of design documents	CEC	N/A	N/A	Y	Y	Y
Does the design consider landscaping convenient to the prevailing natural conditions?	By technical review	Once in the review of design documents	EEC	N/A	N/A	Y	N/A	N/A
Does the design consider training of O&M staff on mechanical and electrical equipment?	By technical review	Once in the review of design documents	EEC	N/A	N/A	N/A	Y	Y
Does the design consider supplying transformers free of PCB?	By technical review	Once in the review of design documents	EIEC	N/A	N/A	N/A	Y	Y
Is the EMP attached to the Contract to form a part of Contract Documents?	By technical review	Once in the review of design documents	PEC	Y	Y	Y	Y	Y
Does the design consider the irrigational and drinking water requirements?	By technical review	Once in the review of design documents	MEC	N/A	N/A	Y	Y	Y
Has PIU evaluated the bidder by checking EMP requirements?	By technical review	Once in the review of design documents	PEC	N/A	Y	Y	Y	Y

INDICATORS	Data Source	Frequency	Responsibility	Achievement from Commencement of Project Till end of Reporting Period (Yes(Y)/No(N)/Not Applicable(N/A))				
	How it will be measured?	How often it will be measured?	Who will measure it?	General	ABISRP 01	ABISRP 02	ABISRP 03	
							Lot 1	Lot 2
Has the Contractor prepared an acceptable EMP based on the Approved IEE?	By technical review	Once in the review of design documents	CEC	Y	N	Y	Y	Y
Has the Contractor developed Contingency Plan for accidents including spill of fuel?	By technical review	Once in the review of design documents	EEC	N/A	N	Y	Y	Y
Has the Contractor submitted the Site Environmental Management Plan?	By technical review	Once in the review of design documents	EEC	N/A	Y	Y	Y	Y
Does the Contractor publish a public notice regarding the nature and location of the project?	Questionnaires	Once in the initial phase of construction project.	C	N/A	N/A	N	N/A	N/A
Has the Consultant conducted training program for WCA?	By the activities of PIU Technical Assistance Team	Once according to the time schedule of the training program	EEC	Y	N/A	N/A	N/A	N/A
Has the Consultant conducted training program for BISA?	By the activities of PIU Technical Assistance Team	Once according to the time schedule of the training program	EEC/MEC	N/A	N/A	N/A	N/A	N/A
Has the EMP been explained to the Contractor before the commencement of works?	By the activities of PIU Technical Assistance Team	Once before the commencement of construction project.	PMC/EEC/PIU	N/A	Y	Y	Y	Y
Has the Contractor defined Environmental Management Officer?	Bidding Documents	Once in bid evaluation phase	C	N/A	Y	Y	Y	Y
Has the Contractor defined Safety Officer?	Bidding Documents	Once in bid evaluation phase	C	N/A	Y	N	Y	Y

CONSTRUCTION PHASE								
Does the Contractor handle the protected plant species, trees taking care of environmental concerns and/or permissions?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Does the Contractor excavate and preserve the topsoil?	Questionnaires	monthly	C	N/A	Y	Y	N/A	N/A
Does the Contractor maximize the use of excavated material for construction works?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Has the Contractor defined the licensed or got permissions borrow area for usage of construction material?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Has the Contractor caused any landslide or erosion?	Questionnaires	monthly	C	N/A	N/A	N	N	N
Has the Contractor stockpiles of excavated material for backfilling?	Questionnaires	monthly	C	N/A	N/A	Y	N	N
Has the Contractor realized the work activities during non-cropping periods?	Questionnaires	monthly	C	N/A	N/A	Y	N/A	N/A
Has the Contractor take measures for providing water continuously during construction work?	Questionnaires	monthly	C	N/A	N/A	Y	N/A	N/A
Has the Contractor defined spoil disposal site with the local authorities?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Does the Contractor disposed/recycled the waste material from the construction area?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Has PCB containing electrical equipment disposed according to the requirements of Gozecoexpertisa?	Questionnaires	monthly	C	N/A	N/A	N/A	Y	Y
Has the Contractor defined material storage area?	Questionnaires	monthly	C	N/A	N/A	N	Y	Y
Has the Contractor defined fuel storage area 20 m away from water course?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Is the noise level in working area below the defined limit 80 dB(A)?	Questionnaires	monthly	C	N/A	Y	Y	Y	Y
Has the Contractor taken noise prevention measures for staff using noisy equipment, vehicles?	Questionnaires	monthly	C	N/A	Y	N	Y	Y
Is the nearest residential area affected by the noise level?	Questionnaires	monthly	C	N/A	Y	N	N	N

Has the working activities limited by daylight hours?	Questionnaires	monthly	C	N/A	N	Y	N	N
Does the Contractor have a water tanker for spraying water to roads?	Questionnaires	monthly	C	N/A	Y	Y	Y	Y
Does the Contractor suppress the dust by watering?	Questionnaires	monthly	C	N/A	Y	Y	Y	Y
Has the Contractor trained the staff on personnel health and sanitation procedures at the working camp, how to interact with the host communities, subprojects environmental protection measures?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Has the Contractor trained the staff on contingency plan?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Has the Contractor trained the personnel for fuel handling procedure?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Does the Contractor train any person for the first aid?	Questionnaires	monthly	C	N/A	N/A	N	Y	Y
Does the Contractor apply any simple training measure for the visitors?	Questionnaires	monthly	C	N/A	N/A	N/A	Y	Y
Does the Contractor keep the records for all kind of training?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Number of accidents occurred during report period?	Questionnaires	monthly	C	N/A	N/A	0	0	0
Does the Contractor supply clean drinking water to the staff?	Questionnaires	monthly	C	N/A	Y	Y	Y	Y
Does the Contractor provide the staff hygienic living and working conditions?	Questionnaires	monthly	C	N/A	N/A	N/A	Y	Y
Does the Contractor have toilets, baths, sleeping quarter, dining hall for the staff?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Does the Contractor have any social facilities like sporting area, canteen, shuttle vehicles to the local centers, etc.?	Questionnaires	monthly	C	N/A	N/A	N/A	Y	Y
Does the Contractor check the health of the staff regularly?	Questionnaires	monthly	C	N/A	Y	N	Y	Y
Does the Contractor keep the health record of the staff?	Questionnaires	monthly	C	N/A	N/A	N	Y	Y
Does the Contractor have adequate fire protection measures?	Questionnaires	monthly	C	N/A	N/A	N	Y	Y

Has the Contractor made available the first aid kit to the staff?	Questionnaires	monthly	C	N/A	N/A	N	Y	Y
Has the Contractor provided safe floor and handrails, stairs, lifts where necessary?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Has the Contractor provided the enough ventilation and lightening in the specific areas?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Has the Contractor provided the safety equipment, material to the staff?	Questionnaires	monthly	C	N/A	N/A	N	Y	Y
Does security staff exist in the working area?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Does the working area have fencing in order to protect intrusion?	Questionnaires	monthly	C	N/A	N/A	N	Y	Y
Has the Contractor defined solid waste storage area?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Has the Contractor defined the area for used material storage?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Does the Contractor apply solid waste separation for recyclable solid waste?	Questionnaires	monthly	C	N/A	N/A	N/A	Y	Y
Does the Contractor keep any record for the waste recycled?	Questionnaires	monthly	C	N/A	N/A	N/A	Y	Y
Does the Contractor keep any record for the solid waste disposed?	Questionnaires	monthly	C	N/A	N/A	N/A	Y	Y
Does the Contractor keep any record for the hazardous waste disposed?	Questionnaires	monthly	C	N/A	N/A	N/A	Y	Y
Does the Contractor use the local public roads even the avoidance from these road(s) possible?	Questionnaires	monthly	C	N/A	N/A	Y	Y	N/A
Has the Contractor collected and disposed the solid waste regularly?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Does the Contractor discharge the sewerage after treatment?	Questionnaires	monthly	C	N/A	N/A	N/A	N/A	N/A
Does the Contractor avoid the peak hours of local traffic in case of use of local public roads?	Questionnaires	monthly	C	N/A	N/A	Y	N/A	N/A
Does the material carried on public roads covered?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Does the Contractor use the vehicles having the controlled exhaust emissions?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Does the Roads selected by the Contractor effect the protected areas?	Questionnaires	monthly	C	N/A	N/A	N	N	N

Does the public informed with adequate signs about the working area and vehicles?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Do the Vehicles of the Contractor fit in to the speed limits?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Does the Contractor repair all infrastructure/roads when damage given by them?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Has the Contractor removed the soil if they contaminated?	Questionnaires	monthly	C	N/A	N/A	Y	Y	Y
Has the Contractor left the working area as defined in Landscape section of the Bidding Documents?	Questionnaires	monthly	C	N/A	N/A	Y	N/A	N/A
Has the Operating Personnel signed and accepted all work sites, labor camps, storage areas and temporary dumping areas?	Questionnaires	monthly	C	N/A	N/A	N/A	N/A	N/A
Number of grievances about the Contractor?	Interview with the relevant authorities	monthly	BISA	N/A	N/A	0	0	0
Number of grievances solved by the Contractor?	Interview with the relevant authorities	monthly	BISA	N/A	N/A	0	0	0
Has the Contractor provided the training on the safe use of electricity and pumps for operational staff?	Questionnaires	Once when the project activities completed	EIEC	N/A	N/A	N/A	Y	Y
Has the Contractor evaluated the trained O&M staff?	Questionnaires	Once when the project activities completed	MEC/EIEC	N/A	N/A	N/A	N/A	N/A
Has the Consultant trained the WCA, BISA staff for irrigation canal and drainage canal management?	Questionnaires	Once when the project activities completed	EEC	Y	N/A	N/A	N/A	N/A
Has the Consultant evaluated the trained WCA, BISA staff?	Questionnaires	Once when the project activities completed	EEC	Y	N/A	N/A	N/A	N/A
Has the Oil Separator regularly checked and properly maintained?	Questionnaires	Once when the project activities completed	EEC	N/A	N/A	N/A	N/A	N/A

Has the relevant organizations observed the irrigation water quality?	Questionnaires	Once when the project activities completed	EEC	N	N/A	N/A	N/A	N/A
Has the relevant organizations observed the ground water level in the irrigation area?	Questionnaires	Once when the project activities completed	EEC	N	N/A	N/A	N/A	N/A
Have the farmers applied crop rotation?	Questionnaires	Once when the project activities completed	BISA	N	N/A	N/A	N/A	N/A
Have the farmers applied environmentally friendly agricultural production techniques?	Questionnaires	Once when the project activities completed	BISA	N	N/A	N/A	N/A	N/A
Has the fertility and productivity been enhanced?	Questionnaires	Once when the project activities completed	BISA	N	N/A	N/A	N/A	N/A
Has the O&M staff applies the national Worker Safety Plan?	Questionnaires	Once when the project activities completed	C	N/A	N/A	N/A	Y	Y
Has the Contractor made facilities available in the operational building with the clean drinking water?	Questionnaires	Once when the project activities completed	C	N/A	N/A	Y	Y	Y
Has the Contractor made facilities available in the operational building with sewerage disposal/handling?	Questionnaires	Once when the project activities completed	C	N/A	N/A	N/A	Y	Y
Has the international agreements about the water abstraction been fitted?	Questionnaires	Once when the project activities completed	EEC	N/A	N/A	N/A	N/A	N/A
GENERAL ENVIRONMENTAL IMPACTS OF THE PROJECT ON THE ENVIRONMENT								
Flow amount of water in channels?	Measurement	Monthly	BISA/WCA	N	N/A	N/A	N/A	N/A
Irrigated Area (ha)	Measurement	Monthly	BISA/WCA	N	N/A	N/A	N/A	N/A
Amount of water used for irrigation purposes.	Measurement	Monthly	BISA/WCA	N	N/A	N/A	N/A	N/A
Water quality of irrigation water (pH, salinity, hardness, BOD, COD, Nitrate, Nitrite, Ammonium, Phosphate, Pesticides, Oil products, phenol) in the project area.	Measurement	Bi-annual	PIU, HGMEs, Uzhydromet	N	N/A	N/A	N/A	N/A
Soil quality/pollution (SOM) (humus), soil carbon, mobile and gross NPK, nitrates, nitrites, ammonium, phosphate, pesticides)	Measurement	Bi-annual	PIU, BISA, HGMEs, and WCAs	N	N/A	N/A	N/A	N/A

Water levels of wells in the irrigated areas? (specify wells)	Measurement	Monthly	BISA/WCA	N	N/A	N/A	N/A	N/A
Amount of water used for irrigation purposes.	Health Statistics of Local Authorities	Yearly	PIU from local MoH	N	N/A	N/A	N/A	N/A
Electricity Consumed before the project by pumping?	Electricity Meter Records	Monthly Consumed, yearly total	BISA	N	N/A	N/A	N/A	N/A
Electricity Consumed after the project by pumping?	Electricity Meter Records	Monthly Consumed, yearly total	BISA	N	N/A	N/A	N/A	N/A
Water quantity pumped before rehabilitation/reconstruction?	Flow Measurement	Monthly, average flow	BISA	N	N/A	N/A	N/A	N/A
Water quantity pumped after rehabilitation/reconstruction?	Flow Measurement	Monthly, average flow	BISA	N	N/A	N/A	N/A	N/A
Reduction in % of GHG by implementation of project?	Calculations	Once based on yearly energy consumption amounts	Calculated by PIU CCMS	N/A	N/A	N/A	N/A	N/A

BISA : Basin Irrigation System Authority of Regions, C: Contractor of any Subcomponent, CEC: Civil Engineer of Consultant, CCMS: Climate Change Mitigation Specialist, EEC: Environmental Expert of Consultant, EIEC: Electrical Engineer of Consultant, EMR: Environmental Monitoring Report, MEC: Mechanical Engineer of Consultant, MoH : Ministry of Health, MRoC: Monthly Report of the Contractor about the Implementation of EMP, PEC: Procurement Expert of Consultant, PMC: Project Manager of Consultant, PIU: Project Implementation Unit, WCA: Water Consumer Associations

ANNEX II- PHOTOS

Construction of Amu Bukhara 1 NEW Pump Station

(ABISRP 01)

Construction of Working Camps



Excavation Works



Concrete Plant and dewatering works



Amu Bukhara Main Canal Regulating Structure

(ABISRP 02)

Construction Works at Peresechenie Regulator



Construction Works at Prokor Area



Modernization and Rehabilitation of Kuyu Mazar Pump Station

(ABISRP 03.1)

Kuyu Mazar Operator's House



Finishing Works



Road Reconstruction



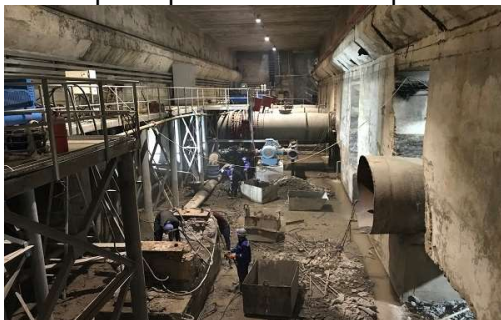
Improvement of Slopes



Modernization and Rehabilitation of Kizil Tapa Pump Station

(ABISRP 03.2)

Kizil Tapa Replacement of Pumps



Auxiliary Systems



Various repair and construction work



Various repair and construction work

