

Environmental Monitoring Report

Semi Annual Report
Project number: 44458-013
October 2022
Reporting period: January-June 2022

Uzbekistan: Amu Bukhara Irrigation System Rehabilitation Project

Prepared by Project Implementation Unit of Amu Bukhara Irrigation System Rehabilitation Project for the Ministry of Water Resources of Uzbekistan Republic and Asian Development Bank.

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

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

CURRENCY EQUIVALENTS

(As of 30 June 2022)¹

Currency unit	–	uzs (лв)
лв 1.00	=	\$ 0.0000920
\$1.00	=	лв 10,860.25

ABBREVIATIONS

ABIS	–	Amu Bukhara Irrigation System
ABISRP	–	Amu Bukhara Irrigation System Rehabilitation Project
ADB	–	Asian Development Bank
BISA	–	Basin Irrigation System Administration
CNTIC	–	China National Technical Import and Export Corporation
EEC	–	Environmental Expert of Consultant
EIA	–	Environmental Impact Assessment
EHS	–	Environmental Health and Safety
EMP	–	Environmental Management Plan
EMMP	–	Environmental Management and Monitoring Plan
EMR	–	Environmental Monitoring Report
GTS	–	General Technical Specification of Contract
GoU	–	Government of Uzbekistan
HGME	–	Hydrogeological Meliorative Expedition
IA	–	Implementing Agency
IEE	–	Initial Environmental Examination report
ISA	–	Irrigation System Administration
JICA	–	Japan International Cooperation Agency
MWR	–	Ministry of Water Resources of the Republic of Uzbekistan
M&ES	–	Monitoring and Evaluation Specialist
OHS	–	Occupational Health and Safety
PIU	–	Project Implementation Unit
SAEMR	–	Semi - Annual Environmental Monitoring Report
CSC	–	Construction Supervision Consultant
SE	–	Site Engineer
SSEMP	–	Site-Specific Environmental Management Plan
SPS	–	Safeguard Policy Statement
PNPC	–	Provincial Level of State Committee for Nature Protection (Oblkompriroda)
PPE	–	Personal Protective Equipment
PS(s)	–	Pump Station(s)
WCA	–	Water Consumers' Association

{WEIGHTS AND MEASURES}

dB	–	Decibel
dB(A)	–	Decibel A Scale
ha	–	hectare
m ³	–	cubic meter

¹ <https://cbu.uz/en/arkhiv-kursov-valyut/index.php>

GLOSSARY

- Emergency Response Plans – Plan to address contingencies associated with process upset and accidental circumstances. They include clearly assigned responsibilities for the assessment of the degree of risk to life and property with procedures on whom to communicate different types of emergencies and how.
- Environmental Assessment – A generic term used to describe a process of environmental analysis and planning to address the environmental impacts and risks associated with a project. The assessment may take the form of an EIA, IEE, environmental audit, or Matrix of Environmental Impacts.
- Environmental Audit – An instrument to determine the nature and extent of all environmental areas of concern at an existing facility or a facility under construction. The audit identifies and justifies appropriate measures to mitigate the areas of concern, estimates the cost of the measures, and recommends a schedule of implementation. For certain projects, the environmental assessment report may consist of an environmental audit alone; in other cases, the audit is part of the environmental assessment documentation.
- Environmental Management Plan (EMP) – A plan that guides the implementation of environmental management and mitigation measures. It contains the following key elements: mitigation measures, implementation and monitoring program, cost estimates, resource requirements, budget, and institutional arrangements.
- Environmental Monitoring Plan – A plan that details environmental monitoring and reporting requirements, including parameters to be measured, methods, sampling locations, frequency of measurements, detection limits, and definition of thresholds that will signal the need for corrective actions; typically, a part of an EMP.
- Hazardous Waste – Substances classified as hazardous waste possess at least one of four characteristics - ignitability, corrosivity, reactivity, or toxicity - or appear on special lists.

NOTE

- (i) In this report, "\$" refers to United States dollars unless otherwise stated.

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

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

Table of Contents

1	INTRODUCTION	1
1.1	Preamble.....	1
1.2	Headline Information	1
2	PROJECT DESCRIPTION AND CURRENT ACTIVITIES	2
2.1	Project Description	2
2.2	Project Contracts and Management	2
2.3	Project Activities During Current Reporting Period	5
2.3.1	Contract ABISRP 01 - Construction of Amu Bukhara 1 New Pump Station.....	5
2.3.2	Contract ABISRP 02 - Modernization and Rehabilitation of Amu Bukhara Main Canal Regulation Structures	6
2.3.3	Contract ABISRP 03 - Modernization & Rehabilitation of Kuyu Mazar and Kizil Tapa Pump Stations.....	6
2.3.4	Summary	7
2.4	Description of Any Changes to Project Design	8
2.5	Description of Any Changes to Agreed Construction methods.....	8
3	ENVIRONMENTAL SAFEGUARD ACTIVITIES	9
3.1	General Description of Environmental Safeguard Activities	9
3.2	Site Audits	9
3.3	Unanticipated Environmental Impacts or Risks.....	16
4	STATUS OF COMPLIANCE WITH COVENANTS.....	17
5	RESULTS OF ENVIRONMENTAL MONITORING	20
5.1	Overview of Monitoring Conducted during Current Period	20
5.1.1	Air Emissions and Ambient Air Quality	20
5.1.2	Wastewater and Ambient Water Quality.....	21
5.1.3	Noise	21
5.1.4	Material Resources Utilization.....	25
5.1.5	Waste Management.....	27
5.1.6	Health and Safety	29
5.2	Summary of Monitoring Outcomes	30
5.3	Training	34
5.4	Complaints	46
6	SUMMARY AND RECOMMENDATIONS	47
6.1	Summary.....	47
6.2	Recommendations	50
	Annex 1. Photos	51
	Annex 2. A Few Examples of OHS and COVID-19 Training Records (ABISRP 01)	60

List of Tables

Table 2-1. Summary of Civil Works Contracts and works' progress	3
Table 2-2. Personnel relevant to Environmental Safeguards.....	4
Table 2-3. Main Construction Activities Carried out During the Reporting Period (January - June 2022).....	7
Table 3-1. Environmental Safeguards Activities Carried out During Reporting Period (January - June 2022).....	9
Table 3-2. Environmental Inspections Carried out During Reporting Period (January - June 2022).....	9
Table 3-3. Status of Non-Conformities	11
Table 4-1. Loan Agreement Compliance Status	17
Table 5-1. Uzbek construction noise norms (KMK 2.01.08 19 - Protection from noise)	21
Table 5-2. Admissible noise level into the living area, both inside and outside the buildings (SanR&N No.0267-09)	22
Table 5-3. Noise Level Guideline (EHS).....	23
Table 5-4. Noise Level Measurements at Amu Bukhara 1 New Pump Station (ABISRP 01) Construction Area	23
Table 5-5. Noise Level Measurements at Kuyu Mazar Pump Station (ABISRP 03 Lot 1) Construction Area	24
Table 5-6. Noise Level Measurements at Kizil Tepa Pump Station (ABISRP 03 Lot 2) Construction Area	24
Table 5-7. Material Resources Utilization at the Construction Site of Amu Bukhara 1 New Pump Station	25
Table 5-8. Material Resources Utilization at the Construction Sites of Amu Bukhara Main Canal Regulation Structures	25
Table 5-9. Material Resources Utilization at the Construction Site of Kuyu Mazar Pump Station	25
Table 5-10. Material Resources Utilization at the Construction Site of Kizil Tepa Pump Station	25
Table 5-11. Cumulative Material Resources Utilization at the Construction Site of Amu Bukhara 1 New Pump Station	26
Table 5-12. Cumulative Material Resources Utilization at the Construction Sites of Amu Bukhara Main Canal Regulation Structures.....	26
Table 5-13. Cumulative Material Resources Utilization at the Construction Site of Kuyu Mazar Pump Station	26
Table 5-14. Cumulative Material Resources Utilization at the Construction Site of Kizil Tepa Pump Station	27
Table 5-15. Solid waste transfer records.....	28
Table 5-16. Solid waste transfer records.....	28
Table 5-17. Total waste disposal amounts	29
Table 5-18. Distribution of total waste disposal amounts.....	29

Table 5-19. Personal Protective Equipment (PPE) Usage and Nucleic Acid Test Numbers (ABISRP 01)	30
Table 5-20. Implementation Status of Corrective Actions proposed in the last environmental monitoring report.....	31
Table 5-21. Summary of Issues Tracking Activity for Current Period.....	32
Table 5-22. Status of NCR (Trend of NCR Closure)	34
Table 5-23. Implementation Status of EMP during the construction period (Packages ABISRP 01, ABISRP 02, ABISRP 03 Lot1, ABISRP 03 Lot2 and ABISRP 04).....	35
Table 5-24. Implementation Status of EMP during the POST-CONSTRUCTION, OPERATIONS PHASE (INCLUDING DEFECT LIABILITY PERIOD) (Package ABISRP 04)	45
Table 5-25. Summary of Complaints received during the monitoring period (and the ones pending since the previous monitoring period(s))	46
Table 6-1. Issues Identified During the Monitoring Period (including the pending issues from the previous report(s)).....	48

List of Figures

Figure 5-1. Summary of Issues by Priority.....	32
Figure 5-2. Summary of Issues by Nonconformity Level	33
Figure 5-3. Time Elapsed to Close any Nonconformity Issue	33

1 INTRODUCTION

1.1 Preamble

1. This is the 14th Semi - Annual Environmental Monitoring Report (SAEMR) for AMU BUKHARA IRRIGATION SYSTEM (ABIS) REHABILITATION PROJECT (ABISRP).

1.2 Headline Information

2. In order to realize a sustainable and reliable water supply in Amu Bukhara Irrigation System (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.

3. The Ministry of Water Resources of the Republic of Uzbekistan (MWR) 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.² JICA will provide parallel financing of \$100.0 million equivalent for the costs of (i) two turnkey contracts (Modernization and Rehabilitation of Kizil-Tepa 1 Pump Station and Modernization and Rehabilitation of Amu-Bukhara 2 Pump Station) under output 1 of the project; and (ii) the consulting services required for the design and construction supervision of item (i) above. JICA will fully administer the scope of works of its parallel financing. During project implementation, ADB and Japan International Cooperation Agency (JICA) will each be responsible for safeguard compliance in their respective project activities.

² [Amu Bukhara Irrigation System Rehabilitation Project: Initial Environmental Examination | Asian Development Bank \(adb.org\)](https://www.adb.org/)

2 PROJECT DESCRIPTION AND CURRENT ACTIVITIES

2.1 Project Description

4. The site of ABISRP is 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.

5. 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.

6. 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.

7. 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

8. Summary of civil works contracts and works' progress is summarized in Table 2-1.

9. According to ADB standards, ADB defined the Amu Bukhara Irrigation System Rehabilitation Project as Category B and in accordance with the Government EIA requirements, this project is classified as Category 3 project³.

10. Supervision Consultant prepared IEE and updated on October 2015 in English and Russian. Russian version of IEE was used as a national EIA report and submitted to State Committee for Nature Protection of the Republic of Uzbekistan in June 2016. The positive conclusion of State Ecological Expertise (SEE) was obtained in October 2016. The conclusion outlines following main conditions during the realization of the Project:

- provision of construction activities only during day-time;
- establishing a traffic route for construction vehicles at least 50-100m distance from residential buildings
- provision for dust suppression of dumps and access roads;
- considering the allocation of work sites, parking and maintenance areas in line with the Resolution of Cabinet of Ministers No.174 dated from April 07, 1992;
- development of measures on reducing of noise and vibration during construction activities, as well as a schedule for noise measuring near to residential areas.

11. All awarded contracts included EMPs cleared by ADB and conditions of applicable national EIA (Environmental Impact assessment)/IEE clearance.

³ <https://www.adb.org/projects/documents/uzb-amu-bukhara-irrigation-system-rehabilitation-project-oct-2015-iee>

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

Package	Scope	Contractor	Signed Date	Approval Date			Name of personnel		Civil Work		Progress as of, %	
				SSEMP	COVID-19 HSMP	ERP	Environmental officer	Health and safety officer	Start Date	End Date	31 Dec, 2021	30 Jun, 2022
ABISRP 01	Construction of Amu Bukhara 1 NEW Pump Station	China National Technical Import and Export Corporation (CNTIC)	02/08/19	06/10/21	08/12/20	08/12/20	Egamov Murod	Bekmuradov Hasan	05/09/19	04/09/23	27.03	40.07
ABISRP 02	Modernization and Rehabilitation of Amu Bukhara Main Canal Regulation Structures	Consortium LLC "Kogon Suv Kurilish" and JSC "Amubukhorokanalkurilish"	16/03/16	15/02/17	22/11/21	22/11/21	Ibadov Rasul	Ibadov Rasul	27/04/16	29/12/23*	57.50	58.50
ABISRP 03 Lot 1	Modernization & Rehabilitation of Kuyu Mazar Pump Station	JV Hebei Construction Group Co, LTD & Hebei Water Conservancy Eng. Bureau	21/12/16	20/02/18	09/12/20	09/12/20	Juraev Aziz	Juraev Aziz	20/09/17	22/04/21**	97.87	97.87
ABISRP 03 Lot 2	Modernization & Rehabilitation of Kizil Tapa Pump Station	JV Hebei Construction Group Co, LTD & Hebei Water Conservancy Eng. Bureau	21/12/16	20/02/18	09/12/20	09/12/20	Juraev Aziz	Juraev Aziz	20/09/17	29/07/21***	99.53	99.53
ABISRP 04	Civil Works for Inter-farm and On-farm Irrigation System Rehabilitation	LLC "Kogon Suv Kurilish"	30/06/16	15/02/17	Not issued	Not issued	Izamov Amin Ashurovich	Izamov Amin Ashurovich	22/08/16	10/09/17	100	100

SSEMP = Site-Specific Environmental Management Plan

HSMP = Health and Safety Management Plan

ERP = Emergency Response Plan

* Extended Completion Date

** Completion and Operational Acceptance dates are contractually different dates. This Contract was extended to 29.05.2021. Actual Completion date of this Contract is 22.04.2021 and the Completion Certificate for this Contract was issued on 24.05.2021 with minor deficiencies. Progress being less than 100% means that the minor deficiencies issued with the Completion Certificate are being eliminated. Upon relevant deficiencies are %100 eliminated, Operational Acceptance Certificate will be issued and the progress will be updated as 100%.

*** Completion and Operational Acceptance dates are contractually different dates. This Contract was extended to 29.07.2021 and the extended completion date of this Contract is given in the table. Contractor notified that the Works had been completed, and applied for the issuance of Completion Certificate on 14.06.2021. Contractually, the Functional Guarantee Tests of pumps had to be carried out after issuance of the Completion Certificate. The Employer asked the Contractor to carry out relevant tests before issuance of Completion Certificate. Tests were carried out first in October 2021 and second time in March 2022, and will be repeated after ongoing irrigation season due to discrepancies in the flowrates. Upon satisfactorily completion of the relevant tests, Completion Certificate will be issued taking into account the completion date as 14.06.2021. Then the completion date in the table will be updated accordingly as actual completion date. Progress being less than 100% means that there are minor deficiencies. Until satisfactorily completion of the tests, these minor deficiencies may be 100% eliminated and both Completion and Operational Acceptance Certificates may be consecutively issued. When the Operational Acceptance Certificate is issued, the progress will be updated as 100%.

12. A list of main organizations involved in the project and relevant to Environmental Safeguards is given in **Error! Reference source not found.** below.

Table 2-2. Personnel relevant to Environmental Safeguards

	Organization's Name	Job Title	Name	e-mail address
Executing Agency	Ministry of Water Resources (MWR)	Director	Khamraev Shavkat Rakhimovich	mwr@minwater.uz
Implementing Agency	Center for Implementation of Foreign Investment Projects in Water Sector under MWR	Director	Bakhtiyor Bakhodirovic Kamalov	agency@minwater.uz
		Environmental Specialist	Sardor Pulatov	abisr@mail.ru
Construction Supervision Consultant	Temelsu International Engineering Services Inc. Sheladia Associates Inc. JV	Team Leader	Nurettin Demir	nurettin.demir@temelsu.com.tr
		Site Engineer	Mustafa Engel	mustafa.engel@temelsu.com.tr
		International Environmental Specialist (8 PMs)	Alper Parlak	alper.parlak@temelsu.com.tr
		National Environmental Specialist (16 PMs)	Sanatulin Sherzod Alisherovich	shonic1987@mail.ru

PM = person-months

13. 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 (EEC)
- Electrical Engineer of Consultant
- Ministry of Health
- Project Manager of Consultant
- Project Implementation Unit
- Water Consumer Associations

14. 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.

15. 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.

16. Additionally, in relation to the environmental aspects, with the support from the international and national Environmental Experts of the Consultants (EECs) of the supervision 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 BISA.
- if additional land required for construction works, ensure that land acquisition and resettlement plan is prepared in accordance with ADB SPS (Safeguard Policy Statement) 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.
- review and approve Site-Specific and Topic Specific Management Plans prepared by Construction Contractor.

17. PIU as responsible implementing agency for the project, recruited a Construction Supervision Consultant (CSC) – joint venture: «Temelsu International Engineering Services Inc» and «Sheladia Associates Inc.». The International EEC (Mr. Alper Parlak) and national EEC (Mr. Sherzod Sanatulin) assist M&ES of PIU in the supervision of the construction activities under the Project.

18. The part of the work of the EEC 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 is just before the commencement of civil works. EECs will develop the content of training.

2.3 Project Activities During Current Reporting Period

2.3.1 Contract ABISRP 01 - Construction of Amu Bukhara 1 New Pump Station

19. During the reporting period, the progress of Works in **Contract ABISRP 01 - Construction of Amu Bukhara 1 New Pump Station** were as followings:

- The overall detailed design progress has reached approximately 80%,
- Reinforced concrete works of the underground part (substructure) of the pump station building have been completed,
- Manufacturing and delivery of the main pumps have been completed, spiral casings of all of the main pumps have been installed to their final positions and second stage concreting around the relevant casings has been completed,
- Manufacturing and factory tests of the main motors have been completed and 3 of 8 main motors have been delivered to site,
- Procurement and delivery of the pump house overhead crane have been completed,
- Main discharge shut-off valves and maintenance valves have been delivered to site,
- Intake gates have been delivered to site,

- Establishment of workshop at site for the manufacturing of discharge pipes has been completed and pipe manufacturing works have commenced,
- Excavation works on the inlet canal continued,
- Excavation works on the route of discharge pipeline has commenced,
- Procurement of the following elements is in progress:
 - Materials/equipment/auxiliary equipment for technical water supply system, oil supply and discharge system, compressed air system and emergency drainage system.

2.3.2 Contract ABISRP 02 - Modernization and Rehabilitation of Amu Bukhara Main Canal Regulation Structures

20. During the reporting period, the Contractor of **Contract ABISRP 02 - Modernization and Rehabilitation of Amu Bukhara Main Canal Regulation Structures** mainly engaged with the following works:

- Completion of the rehabilitation works on Outflow Tudakul on Hydrosystem Prokop,
- Construction works of bypass structure ABK-1 at Hydrosystem Troynik,
- Construction works of bypass structure ABK-2 at Hydrosystem Troynik.

2.3.3 Contract ABISRP 03 - Modernization & Rehabilitation of Kuyu Mazar and Kizil Tepa Pump Stations

21. Under the Modernization and Rehabilitation of Kuyu Mazar and Kizil Tepa Pump Stations (PS(s)) (ABISRP 03) there are two contracts: **Modernization & Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03 Lot 1)** and **Modernization & Rehabilitation of Kizil Tepa Pump Station (ABISRP 03 Lot 2)**. Contracts were signed in December 2016 and became effective in September 2017.

22. **Kuyu Mazar PS:** After examining the facilities with the **Working Commission** and seeing that the Works at KM PS had practically been completed with minor deficiencies, and all the pump units met the specified functional requirements (guaranteed efficiencies); the **Completion Certificate** of the **Contract ABISRP 03 Lot 1** was issued by the CSC on May 24, 2021. During the reporting period, the Contractor mainly engaged with the elimination of deficiencies, the status of which is as follows as of end of the reporting period:

• on Mechanical Works	→22/25	(88%)
• on Electrical Works	→11/12	(92%)
• on Civil Works	→24/27	(88%)
• on Supply of Mandatory Spare Parts	→19/21	(90%)
• on General Items	→4/7	(57%)
• identified by the Local Working Commission	→28/30	(93%)
TOTAL	→108/122	(88.5%)

23. **Kizil Tepa PS:** Contractor, notifying that the main Works had been completed, applied for the issuance of Completion Certificate on 14.06.2021 (before the expiry of the extended completion date, i.e., before 29.07.2021). Contractually, the Functional Guarantee Tests (Performance Tests) of pumps had to be carried out after issuance of the Completion Certificate. The Employer asked the Contractor to carry out relevant tests before issuance of Completion Certificate. Performance tests of the main pumps at KT PS were performed from September 30 to October 09, 2021 in accordance with the "Pump Performance Test Procedure" prepared by the main pumps' manufacturer (Andritz). According to the performance test results, 8 of the pumps at KT PS have failed in attaining the functional guarantees specified in the Contract. The Contractor and Pump Manufacturer claimed that the

calibration of the ultrasonic flowmeters long ago, and the silt accumulated at the intake chambers of pumps and the forebay of the pump station caused the tests to fail. According to the Contract, *in case any of the pumps fails to meet the functional guarantees specified in the Contract, the Contractor shall make changes, modification and/or additions to the Plant or any part thereof as may be necessary to meet at least the minimum level of functional guarantees within 90 days (i.e., in our case until January 12, 2022).* Accordingly, the Contractor was asked to take all necessary remedial actions within specified duration and to repeat the tests latest from January 12, 2022. Contractor mainly engaged with the following works during the reporting period:

- Repetition of the Functional Guarantee Tests from 21 to 25 March 2022,
 - Elimination of some of the minor deficiencies of the facility identified by the CSC on May 26, 2021, the current status of which is as follows:
 - on Mechanical Works →38/41 (93%)
 - on Electrical Works →73/75 (97%)
 - on Civil Works →57/60 (95%)
- TOTAL →168/176 (95%)**

2.3.4 Summary

24. The main project activities carried out during the reporting period include the following:

**Table 2-3. Main Construction Activities Carried out During the Reporting Period
(January - June 2022)**

Site	Construction Activity	Number of Workers	
		Max.	Min.
Construction of Amu Bukhara 1 New Pump Station (ABISRP 01)			
Bukhara-Alat	Construction of the underground part (substructure) of the pump station building	240	60
Modernization and Rehabilitation of Amu Bukhara Main Canal Regulation Structures (ABISRP 02)			
Hydrosystem Troynik	Concrete works of bypass structures ABK-1 and ABK-2	50	15
Modernization and Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03 Lot 1)			
Bukhara-Kuyu Mazar	Elimination of deficiencies	13	10
Modernization and Rehabilitation of Kizil Tepa Pump Station (ABISRP 03 Lot 2)			
Navoi-Kizil Tepa	Repetition of the functional guarantee tests, Elimination of deficiencies	17	11



25. The construction works at Amu Bukhara 1 New Pump Station started in May 2020 in the 10th reporting period (January - June 2020) and are in progress.

26. The construction works within the scope of the Contract ABISRP 02 started in late 2017 and are still in progress.

27. The construction works at Kuyu Mazar and Kizil Tepa Pump Stations started in the 6th reporting period (January - June 2018) and have been completed.

28. Photos of construction works are given in Annex 1. **Photos.**

29. All photos were taken during the current reporting period.

	
<p>Construction of the Underground Part of the Pump Station Building (ABISRP 01) - June 2022</p>	<p>Construction of Bypass Structure ABK-1 at Hydrosystem Troynik (ABISRP 02) - March 2022</p>

2.4 Description of Any Changes to Project Design

30. There has been no change during the reporting period in the design of the project which was assessed in the Impact Assessment phase of the project and was set out in the Initial Environmental Examination/Environmental Impact Assessment.

2.5 Description of Any Changes to Agreed Construction methods

31. 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

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

Table 3-1. Environmental Safeguards Activities Carried out During Reporting Period (January - June 2022)

Environmental Safeguard Activities
The International environmental expert (Alper Parlak) of Supervision Consultant (EEC) - Mr. Parlak's appointment (replacement with Mr. Cimen) was approved in May 2022. - Reviewed the Initial Environmental Examination (IEE) document of the Project and contributed in preparation of the previous SAEMR.
The National environmental expert (Sherzod Sanatulin) of Supervision Consultant (EEC) - Inspected the conditions of the project sites in June 2022 from the point of HSE view.
Construction of Amu Bukhara 1 New Pump Station (ABISRP 01) (Responsible Environmental Staff: Egamov Murod) - Conducted training on COVID-19 in March 2022. - Carried out noise measurements periodically. - Submitted EMR integrated to Monthly Progress Reports (January, February, March, April, May, June 2022)
Modernization and Rehabilitation of Amu Bukhara Main Canal Regulation Structures (ABISRP 02) (Responsible Environmental Staff: Ibadov Rasul) - Obtained official permission from the Operator on 01.05.2022 to use their permanent toilets and bathrooms at Hydrosystem Troynik. - Submitted EMR covering the period January - May 2022 on 16.06.2022.
Modernization and Rehabilitation of Kuyu Mazar Pump Station (ABISRP 03 Lot 1) (Responsible Environmental Staff: Juraev Aziz) - Carried out noise measurements periodically. - Submitted EMR; for July 2021 – May 2022 on 30.05.2022 and, for June 2022 on 18.07.2022.
Modernization and Rehabilitation of Kizil Tapa Pump Station (ABISRP 03 Lot 2) (Responsible Environmental Staff: Juraev Aziz) - Carried out noise measurements periodically. - Submitted EMR; for July 2021 – May 2022 on 29.05.2022 and, for June 2022 on 18.07.2022.

3.2 Site Audits

33. Site inspections were carried out during the reporting period by the national SE and also by the national EEC to check up implementation of environmental protection measures parallel to civil works inspection as indicated below:

Table 3-2. Environmental Inspections Carried out During Reporting Period (January - June 2022)

Date	Conducted by	Purpose	Findings	Corrective Actions (CA)	Responsible for CA
15/06/2022-17/06/2022	Supervision Consultant national EEC	Ensure compliance with General, Environmental and OHS (Occupational health and safety) requirements	Nonconformities observed during inspections have been specified in Table 6-1	Corrective actions have been specified in Table 6-1	HSE Staffs of the Contractors

Date	Conducted by	Purpose	Findings	Corrective Actions (CA)	Responsible for CA
Daily Routine site visits	Supervision Consultant Site Engineers (SE)	Ensure compliance with General, Environmental and OHS (Occupational health and safety) requirements	PPE (Personal protective equipment- particularly safety harness) has not been used by labors working at height (on scaffoldings)	Provision of required PPE to labors and daily control of the use of PPE and immediate warning of those who do not use PPE	HSE Staffs of the Contractors

EEC = environmental expert of consultant, OHS = occupational health and safety, PPE = personal protective equipment

34. Mr. Egamov Murod Kuchkorovich (a local expert) is acting as a part-time Health, Safety and Environmental manager of the Contract ABISRP 01 (Amu Bukhara 1 New Pump Station), while Mr. Bekmuradov Hasan (a local expert) is acting as the Health and Safety responsible of the Contract ABISRP 01 (Amu Bukhara 1 New Pump Station) on a full-time basis.

35. Recently, Mr. Ibadov Rasul replaced Nazirbek Khuzhayev to deal with the Health, Safety and Environmental issues of the Contract ABISRP 02 (ABMC Regulation Structures).

36. Mr. Miao Guowang (a Chinese expert) was the Health, Safety and Environmental Manager of the Contract ABISRP 03 (Lot 1-Kuyu Mazar Pump Station and Lot 2-Kizil Tapa Pump Station). Since, the Works at both pump stations have been substantially completed, Mr. Miao Guowang has left Uzbekistan. Since then, the local Health, Safety and Environmental expert of the Contractor, Mr. Juraev Aziz, has been carrying out HSE related duties on behalf of the Contractor.

37. During the national EEC's site inspections in June 2022, various nonconformities related with Environmental and OHS requirements were observed at the site of Contract ABISRP 01 as given in **Table 6-1**, and the Contractor was asked to take required actions to eliminate relevant nonconformities. The Contractor has shown effort on applying corrective actions on time, and therefore environmental performance of the Contractor is considered to be satisfactory in the reporting period.

38. During the national EEC's site inspections in June 2022, various nonconformities related with Environmental and OHS requirements were observed at the site (Hydrosystem Troynik) of Contract ABISRP 02 as given in **Table 6-1**, and the Contractor was asked to take required actions to eliminate relevant nonconformities. Environmental performance of the Contractor is considered to be poor.

39. During the national EEC's site inspections in June 2022, it was observed that the works at both pump stations of Contract ABISRP 03 were over and there were only a few labors to eliminate the deficiencies and to keep the pump stations in operable condition. However, at the camp of the Contractor at Kuyu Mazar Pump Station, a nonconformity related with housekeeping was observed as given in **Table 6-1**, and the Contractor was asked to take required actions to eliminate relevant nonconformity. Environmental performance of the Contractor is considered to be moderate.

40. Status of Non-Conformities revealed for previous period are given in Table 3-3 below:

Table 3-3. Status of Non-Conformities

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	Comply with the national legislation and contract requirements	N1	Major	31/03/18	Low	Izomov Amin Ashurovich	Closed	22/06/19
2	ABISRP 02 and ABISRP 04 Construction Sites	19/01/18	Environment	Hazardous waste collection area doesn't exist	No need for corrective actions. Since the maintenance of equipment and vehicles are outsourced, waste collection area doesn't exist	N2	Minor	26/01/18	Low	Contractor	Closed	26/01/18
3	ABISRP 02 Construction Sites	19/01/18	Environment	Record of old tires and accumulators have not been kept	Provide the necessary data	N3	Minor	01/03/18	Medium	Izomov Amin Ashurovich	Closed	22/06/19
4	ABISRP 02 Construction Sites	19/08/17	Safety	Labeling doesn't exist for hazardous areas	Comply with the national legislation and contract requirements	N4	Major	01/03/18	High	Izomov Amin Ashurovich	Closed	22/06/19
5	ABISRP 02 Construction Sites and Camps	19/01/18	Environment	Separation of hazardous and solid waste	Sort solid waste separately	N5	Minor	12/02/18	Low	Izomov Amin Ashurovich	Closed	22/06/19
6	ABISRP 02 Construction Sites	19/01/18	Environment	Soil contamination with oil leakage	Remove all waste and contaminated soil. Contaminated soil should be disposed in special drums and transferred to the licenced sub-contractor for further treatment	N6	Minor	12/02/18	Low	Izomov Amin Ashurovich	Closed	19/01/18
7	ABISRP 02 Construction Sites	19/01/18	Health	Hygienic conditions, protection against climatological conditions and light conditions poor	Comply with contract requirements	N7	Minor	12/02/18	Low	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	N8	Major	12/02/18	High	Contractor	Closed	22/06/19
9	ABISRP 03 Lot1 Kuyu Mazar	26/11/17	Environment	National environmental expert has not been hired	Hire the national environmental expert	N9	Major	01/03/18	High	Contractor	Closed	14/02/18
10	ABISRP 03 Lot2 Kizil Tepa	26/11/17	Environment	National Environmental expert has not been hired	Hire the national environmental expert	N10	Major	01/03/18	High	Contractor	Closed	14/02/18

Amu Bukhara Irrigation System Rehabilitation Project
Environmental Monitoring Report (January - June 2022)

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
11	ABISRP 03 Lot1 Kuyu Mazar	26/11/17	Environment	SSEMP not prepared	Prepare SSEMP	N11	Major	20/12/17	High	Contractor	Closed	14/12/17
12	ABISRP 03 Lot2 Kizil Tepa	26/11/17	Environment	SSEMP not prepared	Prepare SSEMP	N12	Major	20/12/17	High	Contractor	Closed	14/12/17
13	ABISRP 03 Lot1 Kuyu Mazar	26/11/17	Environment	Environmental Record System has not been established	Establish the environmental recording system and record the environmental monitoring activities	N13	Major	31/12/17	High	Contractor	Closed	14/05/18
14	ABISRP 03 Lot2 Kizil Tepa	26/11/17	Environment	Environmental Record System has not been established	Establish the environmental recording system and record the environmental monitoring activities	N14	Major	31/12/17	High	Contractor	Closed	14/05/18
15	ABISRP 03 Lot1 Kuyu Mazar	26/11/17	Social	Grievance Redress Mechanism has not been established	Establish the GRM and logbooks	N15	Major	31/01/18	High	Contractor	Closed	14/05/18
16	ABISRP 03 Lot2 Kizil Tepa	26/11/17	Social	Grievance Redress Mechanism has not been established	Establish the GRM and logbooks	N16	Major	31/01/18	High	Contractor	Closed	14/05/18
17	ABISRP 02 Contractor	18/07/18	Environment	EMR prepared per two months	Prepare and submit EMR monthly	N17	Minor	10/08/18	Medium	Contractor	Closed	13/12/21
18	ABISRP 03 Lot1 Kuyu Mazar	17/12/18	Environment	Hazardous wastes observed at site	Follow the rules stated in Hazardous Waste Management Plan, regularly check the site	N18	Major	30/06/19	High	Contractor	Closed	18/06/19
19	ABISRP 03 Lot2 Kizil Tepa	17/12/18	Environment	Oil Spills observed at site	Clean and regularly check the site	N19	Major	30/06/19	High	Contractor	Closed	17/06/19
20	ABISRP 03 Lot2 Kizil Tepa	17/12/18	Environment	The dust formation has been observed at unpaved roads	Spray the unpaved roads with water and regularly check the site	N20	Minor	30/06/19	High	Contractor	Closed	17/06/19
21	ABISRP 03 Lot1 Kuyu Mazar	18/12/18	Environment	The replacement of Environmental Manager has not been declared	Inform PIU/CSC	N21	Minor	01/02/19	Low	Contractor	Closed	04/02/19
22	ABISRP 03 Lot2 Kizil Tepa	18/12/18	Environment	The replacement of Environmental Manager has not been declared	Inform PIU/CSC	N22	Minor	01/02/19	Low	Contractor	Closed	04/02/19
23	ABISRP 03 Lot1 Kuyu Mazar	18/12/18	Environment	The permission for the disposal site of the dredged	Obtain the permission	N23	Major	01/02/19	High	Contractor	Closed	22/04/19

Amu Bukhara Irrigation System Rehabilitation Project
Environmental Monitoring Report (January - June 2022)

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
				material has not been obtained								
24	ABISRP 03 Lot2 Kizil Tapa	18/12/18	Environment	The permission for the disposal site of the dredged material has not been obtained	Obtain the permission	N24	Major	01/02/19	High	Contractor	Closed	21/02/19
25	ABISRP 03 Lot1 Kuyu Mazar	31/12/18	Environment	EMR has not been submitted regularly	All previous EMR's will be send	N25	Major	01/02/19	High	Contractor	Closed	15/01/19
26	ABISRP 03 Lot2 Kizil Tapa	31/12/18	Environment	EMR has not been submitted regularly	All previous EMR's will be send	N26	Major	01/02/19	High	Contractor	Closed	15/01/19
27	ABISRP 03 Lot2 Kizil Tapa	17/06/19	Environment	Hazardous waste storage area doesn't exist	Hazardous waste storage area shall be constructed	N27	Major	27/06/19	High	Contractor	Closed	28/09/19
28	ABISRP 03 Lot2 Kizil Tapa and ABISRP 03 Lot1 Kuyu Mazar	17/06/19	Safety	HSE training records couldn't be presented to ADB mission	Conduct training for Kuyu Mazar & Kizil Tapa Contractor's	N28	Major	30/06/19	High	Supervision Consultant	Closed	22/06/19
29	ABISRP 03 Lot1 Kuyu Mazar	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	N29	Major	30/07/19	High	Contractor	Closed	28/09/19
30	ABISRP 03 Lot1 Kuyu Mazar	18/06/19	Health	Smoke has been formed in the welding area	Ventilation shall be provided in welding area	N30	Major	30/07/19	High	Contractor	Closed	28/09/19
31	ABISRP 02 Construction Sites	21/06/19	Safety	PPE not used by the staff at Kharkhur Construction Site	Daily check, and immediate cautions to the Contractor	N31	Major	01/08/19	High	Supervision Consultant	Closed	28/12/19
32	ABISRP 03 Lot1 Kuyu Mazar	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	N32	Major	19/10/20	High	Contractor	Closed	18/11/21
33	ABISRP 03 Lot2 Kizil Tapa	17/06/19	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	N33	Major	19/10/20	High	Contractor	Closed	19/11/21
34	ABISRP 01 Amu-Bukhara 1	26/12/19	Environment	SSEMP not completed	Finalize SSEMP	N34	Major	31/01/20	High	Contractor	Closed	06/10/21

Amu Bukhara Irrigation System Rehabilitation Project
Environmental Monitoring Report (January - June 2022)

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
35	ABISRP 03 Lot2 Kizil Tapa	27/12/19	Safety	Some fire extinguishers' expiration date passed	Replace the fire extinguishers which are expired	N35	Major	31/01/20	High	Contractor	Closed	10/01/20
36	ABISRP 03 Lot2 Kizil Tapa	27/12/19	Safety	Health and safety training records not kept regularly	Keep the record regularly	N36	Minor	04/01/20	High	Contractor	Closed	10/01/20
37	ABISRP 03 Lot2 Kizil Tapa	27/12/19	Environment	Demolished concrete left in site	Dispose the demolished waste to a site shown by the authorities	N37	Major	27/02/20	High	Contractor	Closed	10/01/20
38	ABISRP 03 Lot1 Kuyu Mazar	28/12/19	Environment	Solid waste disposal records not kept regularly	Keep the record regularly	N38	Minor	04/01/20	High	Contractor	Closed	10/01/20
39	ABISRP 03 Lot1 Kuyu Mazar	28/12/19	Environment	Hazardous solid waste collection and separation not active	Put in progress again hazardous solid waste collection and separation	N39	Major	11/01/20	High	Contractor	Closed	06/01/20
40	ABISRP 03 Lot1 Kuyu Mazar	28/12/19	Safety	Safety measures properly not applied	Conduct additional health and safety training for the staff	N40	Major	31/01/20	High	Contractor	Closed	10/01/20
41	ABISRP 02	31/03/21	Health	Health and Safety Plan against COVID-19 including Emergency Response Plan not prepared	Prepare Health and Safety Plan against COVID-19 including Emergency Response Plan and submit health and safety records of the staff	N41	Major	30/04/21	High	Contractor	Closed	22/11/21
42	ABISRP 02	25/12/21	Environment	The toilet facilities exist at Hydrosystems Prokop and Troynik. 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	Either portable toilets should be used or a cesspit should be built for existing on-site toilets	N42	Major	31/05/22	High	Contractor	Closed	01/05/22
43	ABISRP 02	25/12/21	Environment	The Contractor does not provide information related to the monitoring activities in EMR	Provide monitoring information	N43	Major	15/06/22	High	Contractor	Closed	16/06/22

Amu Bukhara Irrigation System Rehabilitation Project
 Environmental Monitoring Report (January - June 2022)

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
44	ABISRP 02	25/12/21	Environment	The Contractor has no record about the type, quantity of solid waste produced and disposed	Keep a log regarding every kind of wastes generated at site	N44	Major	31/07/22	High	Contractor	Open	
45	ABISRP 03 Lot1 Kuyu Mazar	25/12/21	Environment	The Contractor has not provided monthly EMR in the reporting period (Jul-Dec 2021)	Provide EMR on the monthly basis until end of the Contract, as provided in the previous periods	N45	Major	10/06/22	High	Contractor	Closed	30/05/22
46	ABISRP 03 Lot2 Kizil Tepa	25/12/21	Environment	The Contractor has not provided monthly EMR in the reporting period (Jul-Dec 2021)	Provide EMR on the monthly basis until end of the Contract, as provided in the previous periods	N46	Major	10/06/22	High	Contractor	Closed	29/05/22

41. Non-Conformities recorded in the previous periods related to the construction activities of project components have been tracked in the current reporting period (January-June 2022). Table 3-3 shows the present situation on these tracked non-conformity notices.

42. Contract ABISRP 02 - Contractor removed the toilets in poor condition from the site at Hydrosystem Troynik. Instead, the Contractor obtained official permission from the Operator on 01.05.2022 to use their permanent toilets and bathrooms at the relevant site. Thus, non-conformity on relevant issue has been closed.

43. Contract ABISRP 02 - Contractor submitted an environmental monitoring report (EMR) for January-May 2022 on 16.06.2022. Thus, non-conformity on relevant issue has been closed.

44. Contract ABISRP 02 - Contractor still does not keep any records regarding the types and amount of solid wastes generated and disposed of at the site. There is no proper information about this issue in the so-called environmental monitoring report they submitted to CSC. Therefore, nonconformity 44 is still open.

45. Contract ABISRP 03 - Since the Works at both pump stations were substantially completed in 2021, the Contractor was not submitting environmental monitoring reports since July 2021. In the reporting period, the Contractor submitted all the missing environmental monitoring reports of the previous period, and also submitted the reports required for the reporting period for Kuyu Mazar and Kizil Tepa Pump Stations. Thus, non-conformities on relevant issues have been closed.

3.3 Unanticipated Environmental Impacts or Risks

46. During the current reporting period, COVID-19 pandemic has not affected working conditions. In the previous periods, Environmental Impact and Health and Safety Plans of all the main Contractors were issued incorporating also the Emergency Response Plans against COVID-19 pandemic. As of 7th of June 2022, all the restrictions related to COVID-19 outbreak have been lifted and returned to the previous living conditions in Uzbekistan.

47. No cases of COVID-19 have been reported during the monitoring period.

4 STATUS OF COMPLIANCE WITH COVENANTS

48. Status of compliance with environmental safeguards related covenants in the Project's Loan Agreement signed between Republic of Uzbekistan and ADB on 21 November 2013⁴ is summarized in Table 4-1.

Table 4-1. Loan Agreement Compliance Status

Schedule	Paragraph	Covenant	Compliance Status
4	6	<p><u>Conditions for Award of Contract</u> The Borrower shall not award any Works contract which involves environmental impacts until:</p> <p>(a) the IEE has been approved by the appropriate authority of the Borrower; and</p> <p>(b) the Borrower has incorporated the relevant provisions from the EMP into the Works contract.</p>	<p>Complied with.</p> <p>(a) State Committee for Nature Protection of the Republic of Uzbekistan provided State Ecological Expertise (SEE) in October 2016 (para. 10 on page 2).</p> <p>(b) All awarded contracts included EMPs cleared by ADB and conditions of the SEE listed under para. 11 on page 2.</p>
5	9 (a)	<p><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.</p>	<p>Being complied with all applicable laws and regulations of the Republic of Uzbekistan.</p>
5	9 (b)	<p><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.</p>	<p>Being complied with Environmental Safeguard Policy Statement (June 2009)</p>
5	9 (c)	<p><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 IEE 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.</p>	<p>Being complied with IEE and EMP. Implementation of any corrective or preventive actions set forth in the Semiannual Environmental Monitoring Reports are being strictly followed.</p>
5	12	<p><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.</p>	<p>Being complied with. The borrower makes available the budgetary and human resources to fully implement the EMP whenever required.</p>

⁴ 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>

Schedule	Paragraph	Covenant	Compliance Status
5	13 (a)	<p><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;</p>	<p>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.</p>
5	13 (b)	<p><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.</p>	<p>Being complied with. The bidding documents include the relevant provisions. The borrower makes available the budget for environmental measures whenever required.</p>
5	13 (c)	<p><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.</p>	<p>Being complied with. The bidding documents include the relevant provisions. No environmental, resettlement or indigenous people's risks or impacts issues have been arisen during the implementation of the Project including Jan-Jun 2022 reporting period.</p>
5	13 (d)	<p><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;</p>	<p>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.</p>
5	13 (e)	<p><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.</p>	<p>Being complied with. The bidding documents include the relevant provisions. For the completed project components, pathways, other local infrastructure, and agricultural land is being restored to at least their pre-project condition.</p>

Schedule	Paragraph	Covenant	Compliance Status
5	14 (a)	<p><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;</p>	<p>Being complied with (despite the delay in disclosing at MWR website). Semiannual Environmental Monitoring Report has been prepared and disclosed at ADBs website regularly⁵. SAEMR for Jul-Dec 2020 and Jan-Jun 2021 in English language, and a brief SAEMR for relevant periods in Russian language⁶ were disclosed on MWR's website on 19 Oct 2021. SAEMR for Jul-Dec 2021 has not been disclosed yet on MWR's website.</p>
5	14 (b)	<p><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;</p>	<p>Being complied with. To address unanticipated impact (COVID-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 against COVID-19. The results of activities have been reported regularly. No cases of COVID-19 have been registered among the workers during the monitoring period.</p>
5	14 (c)	<p><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.</p>	<p>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.</p>

⁵ [Amu Bukhara Irrigation System Rehabilitation Project: Environmental Monitoring Report \(July-December 2021\) | Asian Development Bank \(adb.org\)](#)

⁶ <https://water.gov.uz/ru/page/1/6>

5 RESULTS OF ENVIRONMENTAL MONITORING

5.1 Overview of Monitoring Conducted during Current Period

49. Contractor of Construction of Amu Bukhara 1 New Pump Station (ABISRP 01) has monitored workplace and workers to assess effectiveness of health and safety management plans, including COVID-19 measures. Environmental performance of the Contractor is considered to be satisfactory in the reporting period.

50. Contractor of Modernization and Rehabilitation of Amu Bukhara Main Canal Regulation Structures (ABISRP 02) has no monitoring activity of workplace and workers to assess effectiveness of health and safety management plans, including COVID-19 measures. The Contractor submitted an EMR for January-May 2022; however, there is no proper information about the type, quantity of solid waste produced and disposed and about the monitoring activities in the so-called environmental monitoring report they submitted to CSC.

51. Contractor of Modernization and Rehabilitation of Kuyu Mazar and Kizil Tepa Pump Stations (ABISRP 03 Lot 1 and Lot 2), has regularly monitored workplace and workers to assess effectiveness of health and safety management plans, including COVID-19 measures. The works at both pump stations of Contract ABISRP 03 were substantially completed in 2021 and there are only a few labors as indicated in **Table 2-3** to eliminate the deficiencies and to keep the pump stations in operable condition. CSC will issue a "Post-Construction Environmental Audit Report" for this Contract, soon.

52. 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 EMR and in SSEMPs submitted by the Contractors. All the Contractors submitted EMRs in the reporting period.

53. 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.

5.1.1 Air Emissions and Ambient Air Quality

54. 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. Inadequate dust suppression observed rarely on windy days at AB-1 New PS (Contract ABISRP 01) site has been corrected by performing wet dust suppression 2 times per shift.

55. Transportation of excavating materials is ongoing only at AB-1 New PS (Contract ABISRP 01) site. The soil excavated is mostly wet and therefore no additional environmental measure such as using tarpaulins to cover the transported soil while transporting from the site by truck is being taken.

56. 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 and 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.

57. 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 EMP of

the project. Since there is no 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.

5.1.2 Wastewater and Ambient Water Quality

58. Closed septic tanks and toilet facilities exist at Amu Bukhara 1 New Pump Station (ABISRP 01) camp site. The collected sewage has been transferred by septic tank trucks to disposal site. In the working field, workers use temporary toilets. The name of the accredited waste collector company is OLOTBOD LLC in Alat region.

59. Having obtained official permission of the Operator on 01.05.2022, the Contractor (Contract ABISRP 02) is using the Operator's permanent toilets and bathrooms at Hydrosystem Troynik, where the works of relevant Contract are currently ongoing.

60. Closed septic tanks and toilet facilities exist both at Kuyu Mazar Pump Station (ABISRP 03 Lot 1) and at Kizil Tapa Pump Station (ABISRP 03 Lot 2) camp sites. The collected sewage has been transferred by septic tank trucks to disposal site. In the working field, workers use toilets located in the existing pump stations.

61. CSC has not received from the PIU any surface water/irrigation water analysis report for the current reporting period.

5.1.3 Noise

62. The Contractors have fit the daily regular working hours. Since no grievance has been received from the public, it has been considered that noise level does not have any effect on public.

63. 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 5-1.

Table 5-1. Uzbek construction noise norms (KMK 2.01.08 19 - Protection from noise)

Premises and territories	Time	Equivalent sound pressure levels, L_{eq} (dB)									Level of Sound, (dBA)
		31,5	63	125	250	500	1000	2000	4000	8000	
Territories directly adjacent to residential houses, recreation facilities, nursing homes and homes for the elderly and disabled	7.00-										
	23.00	90	75	66	59	54	50	47	45	44	70
	23.00-	83	67	57	49	44	40	37	35	33	60
	7.00										

Premises and territories	Time	Equivalent sound pressure levels, L_{eq} (dB)									Level of Sound, (dBA)
		31,5	63	125	250	500	1000	2000	4000	8000	
Territories directly adjacent to the recreation areas of polyclinics, schools and other general educational institutions, preschools, neighborhoods and groups of residential buildings	-	90	75	66	59	54	50	47	45	44	70

64. 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 5-2.

Table 5-2. 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)
		63	125	250	500	1000	2000	4000	8000	
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

65. The World Bank's "Environmental, Health and Safety General Directives, 2007 (EHS)" is functional instead of PPAH (Pollution Prevention and Abatement Handbook). EHS stipulates that noise at any activity shall not exceed the levels given in the

66. Table 5-3 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. Besides, permissible noise level in the workplaces which is specified in the Sanitary Norms (San R&N No. 0325-16) of the

Republic of Uzbekistan has also been given in the actual noise level measurement tables below (Table 5-4,

67.

68. Table 5-5 and Table 5-6) for comparison.

Table 5-3. Noise Level Guideline (EHS)

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

69. Nearest Receptors to the Working Areas are as 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 Lot 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 Lot 2) construction site is settlement area (houses), which has been located approximately 500 m west.

70. Contractor (ABISRP 01) has monitored the noise levels at the location given in Table 5-4. Applicable standards are indicated both in IFC guidelines (please see paragraph 65 and Table 5-3) and in the Sanitary Norms (San R&N No. 0325-16) of the Republic of Uzbekistan. The measured noise levels have exceeded neither the permissible noise level specified in the referenced IFC guideline nor that of specified in the Sanitary Norms (San R&N No. 0325-16) of the Republic of Uzbekistan. Although the CSC observed that the noise levels are not measured at the nearest receptors; since no grievance has been received from the public (please see paragraph 62), it has been considered that noise level does not have any effect on public.

Table 5-4. Noise Level Measurements at Amu Bukhara 1 New Pump Station (ABISRP 01) Construction Area

Date	Noise Level, dB(A)	Applicable IFC Standard (EHS)	Permissible noise level in workplaces (San R&N No.0325-16)
Jan 2022	50	70	80
Feb 2022	51	70	80
Mar 2022	51	70	80
Apr 2022	53	70	80
May 2022	54	70	80
Jun 2022	54	70	80

71. CSC has not received any noise measurement result from the Contractor (ABISRP 02) for the current reporting period. Closest settlement to Troynik where the construction works are ongoing is Kogon district, whose air distance from Troynik is 20 km. Therefore, and since there is no noisy construction works at Troynik, it is not considered as a noncompliance.

72. Contractor (ABISRP 03 Lot 1) has monitored the noise levels at the locations given in

73.

74. Table 5-5. The measurements have been realized with a digital sound level meter (model no: AR824/SL4001A). The measured noise levels have exceeded neither the permissible noise level specified in the referenced IFC guideline nor that of specified in the Sanitary Norms (San R&N No. 0325-16) of the Republic of Uzbekistan. The contractor has not monitored the noise levels at the nearest receptors defined in paragraph 69 on page 23, since no complains have been received from the relevant settlement areas.

**Table 5-5. Noise Level Measurements at Kuyu Mazar Pump Station (ABISRP 03 Lot 1)
Construction Area**

Date	Noise Level, dB(A)			Applicable IFC Standard (EHS)	Permissible noise level in workplaces (San R&N No.0325-16)
	Location				
	Sediment basin	Pump house	Square in front of pump station		
Jan 2022	62	62	58	70	80
Feb 2022	61	61	59	70	80
Mar 2022	62	60	59	70	80
Apr 2022	60	60	60	70	80
May 2022	58	65	61	70	80
Jun 2022	60	65	62	70	80

75. Contractor (ABISRP 03 Lot 2) has monitored the noise levels at the locations given in Table 5-6. The measurements have been realized with a digital sound level meter (model no: AR824/SL4001A). The measured noise levels have exceeded neither the permissible noise level specified in the referenced IFC guideline nor that of specified in the Sanitary Norms (San R&N No. 0325-16) of the Republic of Uzbekistan. The contractor has not monitored the noise levels at the nearest receptors defined in paragraph 69 on page 23, since no complains have been received from the relevant settlement areas.

**Table 5-6. Noise Level Measurements at Kizil Tepa Pump Station (ABISRP 03 Lot 2)
Construction Area**

Date	Noise Level, dB(A)			Applicable IFC Standard (EHS)	Permissible noise level in workplaces (San R&N No.0325-16)
	Location				
	Sediment basin	Pump house	Square in front of pump station		
Jan 2022	62	63	62	70	80
Feb 2022	61	64	62	70	80
Mar 2022	62	61	63	70	80
Apr 2022	60	62	61	70	80
May 2022	58	59	60	70	80
Jun 2022	60	59	60	70	80

5.1.4 Material Resources Utilization

5.1.4.1 Current Period

76. The utilization of electricity, water and other materials during the reporting period at the construction site of Amu Bukhara 1 New Pump Station (ABISRP 01) is given in Table 5-7.

Table 5-7. Material Resources Utilization at the Construction Site of Amu Bukhara 1 New Pump Station

Resources	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Total
Water (m ³)	472	422	634	654	610	621	3413
Cement (tons)	160	0	373	271	661	521	1986
Iron (tons)	76	0	107.4	46.5	204	159.9	593.8
Fuel (m ³)	28.52	21.08	19.5	30.5	34.9	28.6	163.1
Electricity (kwh)	122740	114728	129229	117592	97591	127944	709824
Sand (m ³)	291	0	679	493	1201	947	3611

77. The utilization of electricity, water and other materials during the reporting period at the construction sites of Amu Bukhara Main Canal Regulation Structures (ABISRP 02) is given in Table 5-8.

Table 5-8. Material Resources Utilization at the Construction Sites of Amu Bukhara Main Canal Regulation Structures

Resources	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Total
Water (m ³)	114.6	108.9	114.6	13.1	120.3	22.9	494.5
Cement (tons)	88	83.6	88.26	79.2	92.41	17.6	449.06
Iron (tons)	10.25	9.85	11.24	11.01	12.28	1.8	56.43
Fuel (m ³)	5.68	6.1	5.42	5.8	6.2	1.4	30.6
Electricity (kwh)	2450	2351	2854	2451	2681	2546	15333
Sand (m ³)	261	247	259	235	273	52	1327

78. The utilization of electricity, water and other materials during the reporting period at the construction sites of Kuyu Mazar Pump Station (ABISRP 03 Lot 1) and Kizil Tapa Pump Station (ABISRP 03 Lot 2) are given in Table 5-9 and Table 5-10 respectively.

Table 5-9. Material Resources Utilization at the Construction Site of Kuyu Mazar Pump Station

Resources	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Total
Water (m ³)	3	3	4	4	4	4	22
Cement (tons)	0	0	0	0	0	0	0
Iron (tons)	0	0	0	0	0	0	0
Fuel (m ³)	0.02	0.02	0.04	0.02	0.08	0.02	0.2
Electricity (kwh)	12	10	10	1	2	6	41
Sand (m ³)	0	0	0	0	0	0	0

Table 5-10. Material Resources Utilization at the Construction Site of Kizil Tapa Pump Station

Resources	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Total
Water (m ³)	5	5	4.5	4	5	4	27.5
Cement (tons)	0	0	0	0	0	0	0
Iron (tons)	0	0	0	0	0	0	0
Fuel (m ³)	0.2	0.2	0.3	0.1	0.1	0.1	1
Electricity (kwh)	3	2	1	1	1	2	10

Resources	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Total
Sand (m ³)	0	0	0	0	0	0	0

5.1.4.2 Cumulative Resource Utilization

79. The resources utilization records have been kept starting from the 10th SAEMR. The data given in Table 5-11 covers the cumulative utilization of the material resources at the construction site of Amu Bukhara 1 New Pump Station (ABISRP 01) until end of current reporting period.

Table 5-11. Cumulative Material Resources Utilization at the Construction Site of Amu Bukhara 1 New Pump Station

Resources	Reporting Period					Total
	10	11	12	13	14	
Water (m ³)	20	1596	2850	6950	3413	14829
Cement (tons)	40	42	1370	3370	1986	6808
Iron (tons)	-	-	320	468	593.8	1381.8
Fuel (m ³)	15	247	249	527	163.1	1201.1
Electricity (Mwh)	7	951	1223.3	819.6	709.8	3710.7
Sand (m ³)	65	57	-	9124	3611	12857

80. The data given in Table 5-12 covers the cumulative utilization of the material resources at the construction sites of Amu Bukhara Main Canal Regulation Structures (ABISRP 02) until end of current reporting period.

Table 5-12. Cumulative Material Resources Utilization at the Construction Sites of Amu Bukhara Main Canal Regulation Structures

Resources	Reporting Period					Total
	10	11	12	13	14	
Water (m ³)	13	-	-	1092	494.5	1599.5
Cement (tons)	840	-	-	504	449.06	1793.06
Iron (tons)	6.4	-	-	32.09	56.43	94.92
Fuel (m ³)	12	5	5	14.5	30.6	67.1
Electricity (Mwh)	1.7	-	-	16.334	15.333	33.367
Sand (m ³)	912	-	-	573	1327	2812

81. The data given in Table 5-13 and Table 5-14 covers the cumulative utilization of the material resources at the construction sites of Kuyu Mazar (ABISRP 03 Lot 1) and Kizil Tepa (ABISRP 03 Lot 2) Pump Stations until end of current reporting period.

Table 5-13. Cumulative Material Resources Utilization at the Construction Site of Kuyu Mazar Pump Station

Resources	Reporting Period					Total
	10	11	12	13	14	
Water (m ³)	334	158	158	18	22	690
Cement (tons)	372	235	235	16	0	858
Iron (tons)	89	86	86	20	0	281
Fuel (m ³)	355	195	195	15	0.2	760.2

Resources	Reporting Period					Total
	10	11	12	13	14	
Electricity (Mwh)	2.4	0.3	0.3	0.07	0.04	3.11
Sand (m ³)	155	91	-	9	0	255

Table 5-14. Cumulative Material Resources Utilization at the Construction Site of Kizil Tepas Pump Station

Resources	Reporting Period					Total
	10	11	12	13	14	
Water (m ³)	549	304	304	35	27.5	1219.5
Cement (tons)	73	294	294	23	0	684
Iron (tons)	12	75	75	12	0	174
Fuel (m ³)	19	340	340	17.5	1	717.5
Electricity (Mwh)	3.1	0.3	0.3	0.079	0.01	3.789
Sand (m ³)	129	135	-	13	0	277

5.1.5 Waste Management

82. The Contractor of Amu Bukhara 1 New Pump Station (ABISRP 01) submitted Waste Management Plan and Hazardous Waste Management Plan which were integrated into the SSEMP. The final version of the Waste Management Plan and the Hazardous Waste Management Plan were given in the SSEMP approved in the previous reporting period.

83. The solid waste disposal area of the Contractor of Amu Bukhara 1 New Pump Station (ABISRP 01) is the Alat Solid Waste Disposal Area. The Contractor declared in the Monthly Progress Reports that the solid wastes were collected and disposed of by Alat Local Authority (Olot Obod LLC).

84. The solid waste disposal area of the Contractor of Amu Bukhara Main Canal Regulation Structures (ABISRP 02) is the Kuyu Mazar Solid Waste Disposal Area. The Contractor declared in the previous reporting period that he signed an agreement with the Toza-Khudud Municipal Unitary Enterprise for waste disposal.

85. The Contractor of Kuyu Mazar Pump Station (ABISRP 03 Lot 1) submitted a Waste Management Plan on 11th May 2018 and Hazardous Materials Management Plan on 10th May 2018 (Semi-annual EMR R.06).

86. The solid waste disposal area of the Contractor of Kuyu Mazar Pump Station (ABISRP 03 Lot 1) was declared as Kuyu Mazar Solid Waste Disposal Area which is approximately 3 km away from the Kuyu Mazar Pump Station.

87. The Contractor of Kizil Tepas Pump Station (ABISRP 03 Lot 2) submitted a Waste Management Plan on 11th May 2018 and Hazardous Materials Management Plan on 10th May 2018 (Semi-annual EMR R.06).

88. The solid waste disposal area of the Contractor of Kizil Tepas Pump Station (ABISRP 03 Lot 2) was declared as a local Solid Waste Disposal Area which is approximately 6 km away from the Kizil Tepas Pump Station.

5.1.5.1 Current Period

89. During the current reporting period (January - June 2022), the Contractor of Amu Bukhara 1 New Pump Station (ABISRP 01) has dumped domestic solid waste to the site defined by Olot Obod LLC. Waste disposal records kept by the Contractor are given in Table 5-15 below. The transfer and disposal of domestic solid waste has been realized by Olot Obod LLC firm.

Table 5-15. Solid waste transfer records

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	
January 2022					40	Alat Solid Waste Disposal Area
February 2022					40	
March 2022					40	
April 2022					40	
May 2022					40	
June 2022					40	
EMR-14 TOTAL	0	0	0	0	240	

90. During the current reporting period (January - June 2022), the Contractor of Amu Bukhara Main Canal Regulation Structures (ABISRP 02) has no record about the type, quantity of solid waste produced and disposed. Some domestic solid waste has been observed at the construction and camping site at Hydrosystem Troynik.

91. During the current reporting period (January - June 2022), the Contractor of Kuyu Mazar Pump Station (ABISRP 03 Lot 1) declared in the Environmental Monitoring Reports that he extended his agreement with the Toza-Khudud Municipal Unitary Enterprise for domestic waste disposal, in 2022. However, no information about the type, quantity of domestic waste produced and disposed was provided in the relevant monitoring reports.

92. During the current reporting period (January - June 2022), the Contractor of Kizil Tepa Pump Station (ABISRP 03 Lot 2) declared in the Environmental Monitoring Reports that he extended his agreement with the Toza-Khudud Municipal Unitary Enterprise for domestic waste disposal, in 2022. The information given in the relevant monitoring reports on the domestic waste produced and disposed is as given in Table 5-16Table 5-15 below.

Table 5-16. Solid waste transfer records

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	
January 2022					7	Kuyu Mazar Solid Waste Disposal Area
February 2022					9	
March 2022					9	
April 2022					10	
May 2022					6	
June 2022					6	
EMR-14 TOTAL	0	0	0	0	47	

5.1.5.2 Cumulative Waste Generation

93. During the current reporting period (January - June 2022), totally 287 m³ of solid waste has been originated (recorded amount) within the scope of Amu Bukhara Irrigation System Rehabilitation Project by all contractors: 240 m³ of solid waste has been originated from the Contractor of Amu Bukhara 1 New Pump Station (ABISRP 01), 47 m³ of solid waste has been originated from the Contractor of Kizil Tepa Pump Station (ABISRP 03 Lot 2), no solid waste has been originated from the other Contractors in the Project.

94. The cumulative solid waste generation volume reached to 1288.40 m³ during the current reporting period, including 42.00 m³ of recycled or reused solid waste. Approximately 3% of this cumulative waste volume has been restored for reuse and recycling purposes. The progress in solid waste disposal has been shown in Table 5-17 below.

Table 5-17. Total waste disposal amounts

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
12	305.50	0
13	252	0
14	287	0
Total	1288.40	42.00

Table 5-18. Distribution of total waste disposal amounts

EMR Report Number	Amu Bukhara 1 New		Kuyu Mazar		Kizil Tapa		Total	
	Disposed	Recycled or reused	Disposed	Recycled or reused	Disposed	Recycled or reused	Disposed	Recycled or reused
6			3	0	3.90	0	6.90	0
7			42.62	0	12	42	54.62	42
8			11.88	0	18	0	29.88	0
9			53	0	70	0	123	0
10			53.50	0	148	0	201.50	0
11			16	0	12	0	28	0
12	181	0	9.50	0	115	0	305.50	0
13	252	0	0	0	0	0	252	0
14	240	0	0	0	47	0	287	0
Total	673	0	189.50	0	425.90	42	1288.40	42

95. During the 14th reporting period, no hazardous waste has been produced at construction sites.

5.1.6 Health and Safety

5.1.6.1 Community Health and Safety

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

5.1.6.2 Worker Health and Safety

97. All the Contractors have the Approved Health and Safety Plans, including Emergency Response Plans with COVID-19 risk assessment.

98. COVID-19 measures have been successfully applied by the Contractors and necessary trainings were conducted during the peak period of COVID-19 outbreak.

99. No cases of COVID-19 have been reported during the monitoring period. As of 7th of June 2022, all the restrictions related to COVID-19 outbreak have been lifted and returned to the previous living conditions in Uzbekistan.

100. CNTIC, the Contractor of Amu Bukhara 1 New Pump Station (ABISRP 01), generally complies with PPE use, although some nonconformities during national EEC's site inspection

in June were observed. 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.

Table 5-19. Personal Protective Equipment (PPE) Usage and Nucleic Acid Test Numbers (ABISRP 01)

PPE type / Test Month	Unit	Used by (pcs)					
		Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22
Medical Mask	pcs	4540	7120	6040	6040	11920	11920
FFPZ-FFP3- N95 Mask	pcs	-	-	-	-	-	-
Face Shield	pcs	-	-	-	-	-	-
Glove	pcs	1920	3300	2760	2760	5460	5460
Disinfectant	liter	30	30	20	20	40	40
Nucleic acid test	1/month	64	110	92	92	182	182
	2/month	11	8	8	8	10	10

101. Kogon Suv Kurilish, the Contractor of Amu Bukhara Main Canal Regulation Structures (ABISRP 02), due to either absence or frequent replacement the HSE personnel, has difficulty in complying with Health and Safety Plan.

102. HBCG, the Contractor of both Kuyu Mazar Pump Station (ABISRP 03 Lot 1) and Kizil Tepa Pump Station (ABISRP 03 Lot 2), has a few labors at sites to eliminate the deficiencies and to keep the pump stations in operable condition, since the construction activities have been completed. In the reporting period, it was reported by the Contractor that on January 10 and February 2, 4 personnel at KMPS had nucleic acid tests and the test results demonstrated to be COVID-19 negative. No major nonconformity was observed during reporting period.

5.2 Summary of Monitoring Outcomes

103. The instrumental and visual monitoring activities have been applied by the Contractors and CSC field experts regularly. Only the Contractor (of Contract ABISRP 02) does not provide information related to the monitoring activities in EMR.

104. Based on the visual inspection and EMRs, the air, noise and water quality conditions has not considerably changed during the project construction span.

105. Implementation status of corrective actions proposed for the nonconformities opened in the previous period is given in Table 5-20 below.

Table 5-20. Implementation Status of Corrective Actions proposed in the last environmental monitoring report

Issue	Required Action	Responsibility	Timing (Target Dates)	Description of Resolution and Timing (Actual)	If not yet resolved, indicate the reason why and specify further required action and timeframe
1. The toilet facilities exist at Hydrosystems Prokop and Troynik. 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	Either portable toilets should be used or a cesspit should be built for existing on-site toilets	Contractor (ABISRP 02) ⁷	15/06/22	RESOLVED. The works on Hydrosystem Prokop have been completed, the Contractor has demobilized from the relevant site. The works on Hydrosystem Troynik is ongoing. The Contractor removed the toilets in poor condition from the site. Instead, the Contractor obtained official permission from the Operator on 01.05.2022 to use their permanent toilets and bathrooms at the relevant site. Closed on 01.05.2022.	
2. The Contractor does not provide information related to the monitoring activities in EMR	Provide monitoring information	Contractor (ABISRP 02)	15/06/22	RESOLVED. The Contractor submitted an EMR for January-May 2022 on 16.06.2022. Closed on 16.06.2022.	
3. The Contractor has no record about the type, quantity of solid waste produced and disposed	Keep a log regarding every kind of wastes generated at site	Contractor (ABISRP 02)	15/06/22	OPEN.	Previous HSE staff of the Contractor did not keep any record, new HSE staff has been instructed to arrange logs until 15/09/22
4. The Contractor has not provided monthly EMR in the reporting period (Jul-Dec 2021)	Provide EMR on the monthly basis until end of the Contract, as provided in the previous periods	Contractor (ABISRP 03 Lot 1) ⁸	10/06/22	RESOLVED. The Contractor submitted EMR; - for July 2021 - May 2022 on 30.05.2022, and, - for June 2022 on 18.07.2022. Closed on 30.05.2022.	
5. The Contractor has not provided monthly EMR in the reporting period (Jul-Dec 2021)	Provide EMR on the monthly basis until end of the Contract, as provided in the previous periods	Contractor (ABISRP 03 Lot 2) ⁹	10/06/22	RESOLVED. The Contractor submitted EMR; - for July 2021 - May 2022 on 29.05.2022, and, - for June 2022 on 18.07.2022. Closed on 29.05.2022.	

⁷ Modernization and Rehabilitation of Amu Bukhara Main Canal Regulating Structure

⁸ Modernization & Rehabilitation of Kuyu Mazar Pump Station

⁹ Modernization & Rehabilitation of Kizil Tepa Pump Station

106. SAEMR for Jul-Dec 2020 and Jan-Jun 2021 in English¹⁰ language, and a brief SAEMR for relevant periods in Russian¹¹ language was disclosed on MWR’s website on 19 Oct 2021. **However, the last SAEMR (for Jul-Dec 2021) has not been disclosed on MWR’s website yet.**
107. During the current reporting period (January - June 2022) fourteen (14) new nonconformity issues have been recorded. In the reporting period, 4 out of 5 nonconformity issues from the previous reporting period were closed; and **as of 05.08.2022**, 10 out of 14 new nonconformity issues from the current period were closed. Total number of nonconformity issues observed in the Project until end of current reporting period is 60, out of which 92% have been closed.

Table 5-21. Summary of Issues Tracking Activity for Current Period

Total Number of Issues for Project	60
Number of Open Issues	5
Number of Closed Issues	55
Percentage Closed	92%
Issues Opened in This Reporting Period	14
Issues Closed in This Reporting Period	10

108. The distribution of nonconformity issues based on priority is shown in Figure 5-1 and nonconformity level in Figure 5-2.

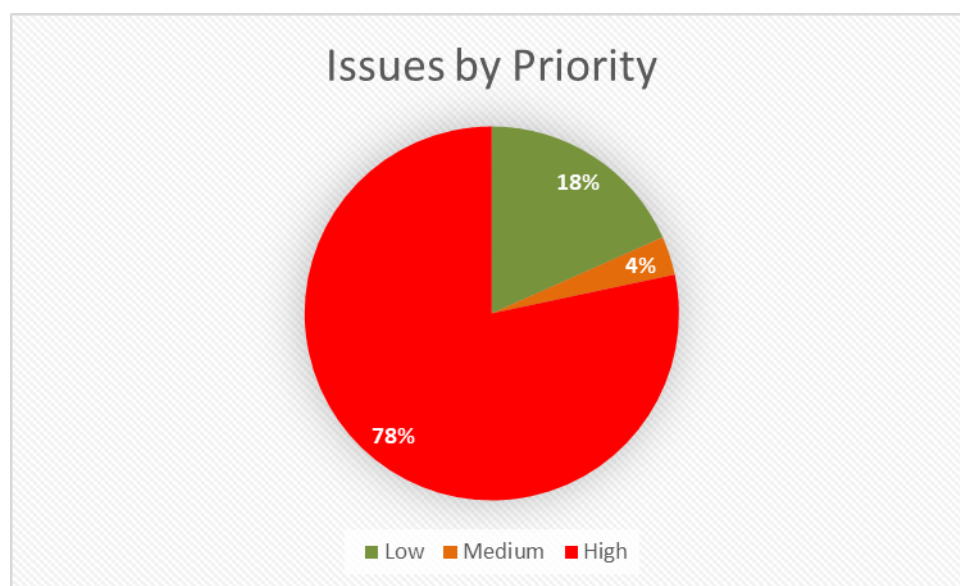


Figure 5-1. Summary of Issues by Priority

¹⁰ <https://water.gov.uz/en/page/1/6>

¹¹ <https://water.gov.uz/ru/page/1/6>

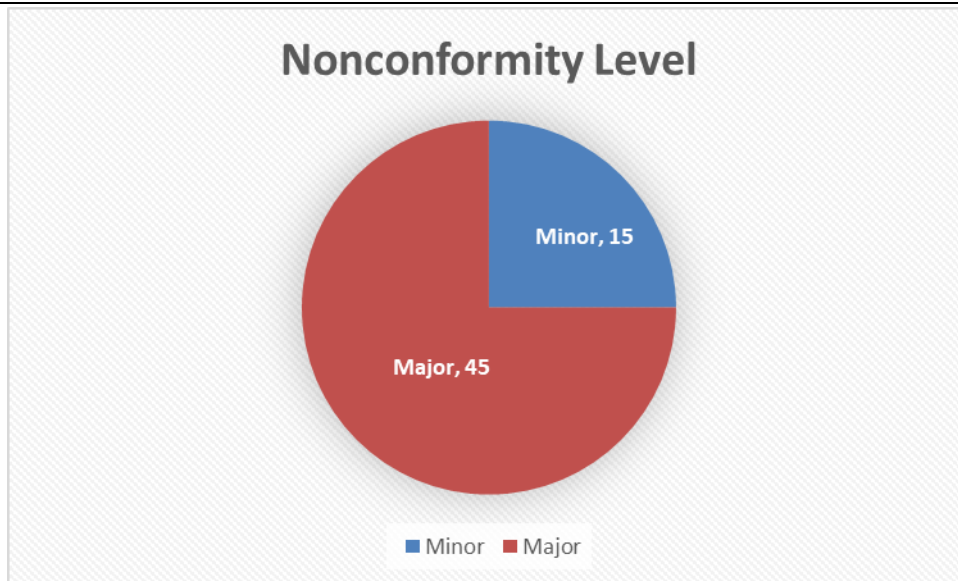


Figure 5-2. Summary of Issues by Nonconformity Level

109. Duration to close any issue takes more than 30 days. The distribution of days required to close any issue has been shown in Figure 5-3.

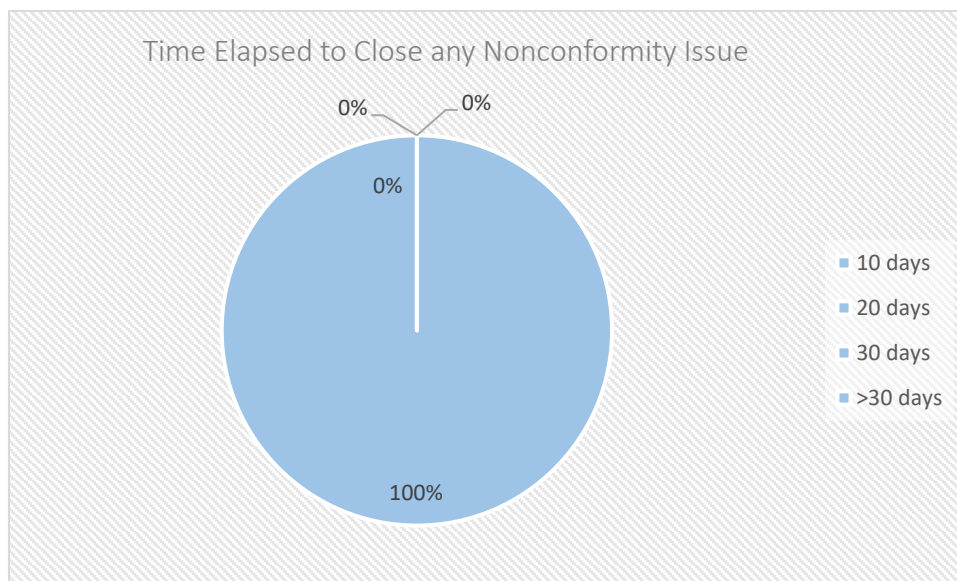


Figure 5-3. Time Elapsed to Close any Nonconformity Issue

110. Based on the record time, the trends of issues closed are as follows:

Table 5-22. Status of NCR (Trend of NCR Closure)

Semi-annual Report No	Total Number of Issues opened in Reporting Period	% of issues closed on time	% of issues closed late
6	7	29%	71%
7	10	50%	50%
8	7	17%	83%
9	7	57%	43%
10	0	NA	NA
11	0	NA	NA
12	1	0%	100%
13	5	60%	20%
14	14	70%	0%

5.3 Training

111. CNTIC, the Contractor of Amu Bukhara 1 New Pump Station (ABISRP 01), has conducted regular health, safety and environmental, site access and COVID-19 protection trainings for all staff working in construction site during the reporting period (See **Annex 2. A Few Examples of OHS and COVID-19 Training Records (ABISRP 01)** for training logs).

112. No training record has been presented to CSC by Kogon Suv Kurilish, the Contractor of Amu Bukhara Main Canal Regulation Structures (ABISRP 02).

113. HBCG, the Contractor of Kuyu Mazar and Kizil Tepa Pump Stations (ABISRP 03 Lot 1 and Lot 2), has conducted regular health, safety and environmental, site access and COVID-19 protection trainings for the existing personnel at site.

114. After the designation of the environmental staff by the Contractor of Amu Bukhara 1 New Pump Station (ABISRP 01), CSC has planned to organize a training session for the relevant staff. The subject of the training session will cover environmental, occupational health and safety trainings of the Contractor's staff, monitoring, recording, and reporting responsibilities of the Contractor. The training for this issue, which was planned for second quarter of 2021, has been postponed to the third quarter of 2022, due to COVID-19 pandemic.

Table 5-23. Implementation Status of EMP during the construction period (Packages ABISRP 01, ABISRP 02, ABISRP 03 Lot1, ABISRP 03 Lot2 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	SSEMP (Rev.5) completed in August 2021 and approved in October 2021, while the Works commenced in May 2020	
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		
Rehabilitation activities during cropping season	<ul style="list-style-type: none"> Remove all waste and unused pipes. 	Yes		
	<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 (proposed site) to continue uninterrupted supply of irrigation 	Yes		

Subject	EMP Requirement	Compliance Attained	Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
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;	-	There is not much metal-based scrap yet	
	• Land fill sites to be closed and rehabilitated	-	Works not completed yet	
	• Old rising main pipes to be removed and disposed or recycled	-	No old rising main pipes	
	• 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	Partial	Lack of a secondary containment vessel of the diesel fuel storage tank to protect against emergency leakage and soil contamination	Rise the diesel fuel storage tank up on a concrete pond (Target Date - 30.09.2022)
	• 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	Partial	Inadequate dust suppression, especially on the windy days	Perform wet dust suppression at construction site at least 2 times per shift (Closed - 15.07.2022)
Worker Health and Safety	• Contractor to implement workplace safety awareness program.	Yes		
	• Workers to be provided with safety equipment and instructed in its use.	Partial	<ul style="list-style-type: none"> Not using PPE (safety harness) when working at height on the scaffolding 	<ul style="list-style-type: none"> Provide the workers working on scaffolding with safety harnesses and make sure workers use these safety harnesses (Closed - 15.07.2022)

Subject	EMP Requirement	Compliance Attained	Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
			<ul style="list-style-type: none"> Inadequate use of PPE for those working at pipeline fabrication site 	<ul style="list-style-type: none"> Provide the workers with special shoes with Impact Resistant Toe to prevent damage to the feet (Closed - 15.07.2022) Provide the workers carrying out welding work in confined spaces with a respirator to avoid vapor poisoning during welding (Closed - 15.07.2022)
	<ul style="list-style-type: none"> Emergency accident -contingency plan 	Yes		
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 	Yes		
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 Restore sites by replacing topsoil and re-vegetating area Final payment may be withheld until work is completed 	-	Works not completed yet	
Inspection and acceptance of construction works before handing over	<ul style="list-style-type: none"> Inspection and signed acceptance by Operating Personnel 	-	Works not completed yet	
ABISRP 02				
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. Approve the commencement of work only after the contractor understands the EMP 	Yes		
		Partial	EMR not prepared properly and on the monthly basis	Prepare EMR properly indicating all the monitoring

Subject	EMP Requirement	Compliance Attained	Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
				activities and submit on the monthly basis (Target Date - 30.12.2022)
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		
Rehabilitation activities during cropping season	<ul style="list-style-type: none"> Remove all waste and unused pipes. 	Yes		
	<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 	Partial	Spilling of concrete residues on the ground adjacent to the construction site (Hydrosystem Troynik)	Remove all the concrete residues (Closed - 01.08.2022)
	<ul style="list-style-type: none"> Sell metal-based scrap and equipment to scrap dealers in Alat and Bukhara; 	Yes		
	<ul style="list-style-type: none"> Land fill sites to be closed and rehabilitated 	Yes		
	<ul style="list-style-type: none"> Old rising main pipes to be removed and disposed or recycled 	-		

Subject	EMP Requirement	Compliance Attained	Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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		
	<ul style="list-style-type: none"> Bund fuel tank storages to 110% of tank capacity. Refuel vehicles and equipment 20 m away from water courses 	Yes		
	<ul style="list-style-type: none"> Dispose of used oil and oil filters to meet accepted industry procedures 	Yes		
	<ul style="list-style-type: none"> Accidental spill handling action (contingency) plan 	Yes		
Noise from construction equipment; e.g., jack hammers, air compressors	<ul style="list-style-type: none"> Equipment fitted with approved sound suppression equipment and maintained 	No	Not required	
	<ul style="list-style-type: none"> Operators provided with ear protection 	Yes		
	<ul style="list-style-type: none"> Limit activities to daylight hours 	Yes		
Dust	<ul style="list-style-type: none"> Contractor to provide water tanker or necessary provisions 	Yes		
	<ul style="list-style-type: none"> Contractor to spray water on work areas and roads as required 	Yes		
Worker Health and Safety	<ul style="list-style-type: none"> Contractor to implement workplace safety awareness program. 	Yes		
	<ul style="list-style-type: none"> Workers to be provided with safety equipment and instructed in its use. 	No	Lack of fence around the deep construction pit (Hydrosystem Troynik)	Fence the deep construction pit with signal tape (Closed - 05.08.2022)
			Absence of firefighting equipment at construction site and temporary camp (Hydrosystem Troynik)	Provide the construction site and temporary camp with firefighting equipment (Closed - 05.08.2022)
	<ul style="list-style-type: none"> Emergency accident -contingency plan 	Yes		
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 	Yes		
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		
	<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		

Subject	EMP Requirement	Compliance Attained	Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
Rehabilitation and closing of construction sites	<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 	-	Works have not been completed yet.	
ABISRP 03 Lot 1				
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. 	NA		
Introduction of contractor to the site.	<ul style="list-style-type: none"> EMP explained to contractor on-site before any work commences. 	NA		
	<ul style="list-style-type: none"> Approve the commencement of work only after the contractor understands the EMP 	NA		
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. 	NA		
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. 	NA		
	<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. 	NA		
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. 	NA		
	<ul style="list-style-type: none"> If borrow pits essential. to be approved by PNPC and Ministry of Geology 	NA		
	<ul style="list-style-type: none"> Borrow pits to be closed and landscaped. 	NA		
	<ul style="list-style-type: none"> Stockpile excavated materials alongside open trench for backfilling; use for road formation 	NA		
	<ul style="list-style-type: none"> Replace excavated material and landscape the area. 	NA		
	<ul style="list-style-type: none"> Remove all waste and unused pipes. 	NA		
	<ul style="list-style-type: none"> Undertake pump station construction, rehabilitation planning and arranging to supply the minimum water requirements. 	NA		

Subject	EMP Requirement	Compliance Attained	Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
Rehabilitation activities during cropping season	<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 	NA		
Removal and disposal of debris	<ul style="list-style-type: none"> Debris to be dumped in land fill sites approved by Oblast Gosproidom & Hokimiyat 	NA		
	<ul style="list-style-type: none"> Sell metal-based scrap and equipment to scrap dealers in Alat and Bukhara; 	NA		
	<ul style="list-style-type: none"> Land fill sites to be closed and rehabilitated 	NA		
	<ul style="list-style-type: none"> Old rising main pipes to be removed and disposed or recycled 	NA		
	<ul style="list-style-type: none"> Any electrical equipment found to contain PCBs is to be disposed of in accordance with Gozecoexpertisa requirements: 	NA		
Storage and Handling of construction materials, fuel and lubricants	<ul style="list-style-type: none"> 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 	NA		
	<ul style="list-style-type: none"> Bund fuel tank storages to 110% of tank capacity. Refuel vehicles and equipment 20 m away from water courses 	NA		
	<ul style="list-style-type: none"> Dispose of used oil and oil filters to meet accepted industry procedures 	NA		
	<ul style="list-style-type: none"> Accidental spill handling action (contingency) plan 	NA		
Noise from construction equipment; e.g. jack hammers, air compressors	<ul style="list-style-type: none"> Equipment fitted with approved sound suppression equipment and maintained 	NA		
	<ul style="list-style-type: none"> Operators provided with ear protection 	NA		
	<ul style="list-style-type: none"> Limit activities to daylight hours 	NA		
Dust	<ul style="list-style-type: none"> Contractor to provide water tanker or necessary provisions 	NA		
	<ul style="list-style-type: none"> contractor to spray water on work areas and roads as required 	NA		
Worker Health and Safety	<ul style="list-style-type: none"> Contractor to implement workplace safety awareness program. 	NA		
	<ul style="list-style-type: none"> Workers to be provided with safety equipment and instructed in its use. 	NA		
	<ul style="list-style-type: none"> Emergency accident -contingency plan 	NA		
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 	NA		
Transport of equipment and	<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; 	NA		

Subject	EMP Requirement	Compliance Attained	Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
material in existing roads	observe speed limits and maintain in the good condition; transport material under cover; avoid peak hours in roads with moderate to high traffic.			
	• Contractor attends to repair all damaged infrastructure/ roads, if needed. with relevant authorities (Hokimiyat);	NA		
Rehabilitation and closing of construction sites	• Remove all waste and contaminated soil	NA		
	• Restore sites by replacing topsoil and re-vegetating area	NA		
	• Final payment may be withheld until work is completed	NA		
Inspection and acceptance of construction works before handing over	• Inspection and signed acceptance by Operating Personnel	NA		Works have been completed in 2021 and the Completion Certificate was issued. Supply of missing spare parts is awaited to initiate Operational Acceptance Procedure.
ABISRP 03 Lot 2				
Awareness campaign	• Undertake a public awareness campaign to create awareness among farmers of the construction work plan and possible impacts on irrigation delivery.	NA		
Introduction of contractor to the site.	• EMP explained to contractor on-site before any work commences.	NA		
	• Approve the commencement of work only after the contractor understands the EMP	NA		
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.	NA		
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.	NA		
	• 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.	NA		
	• Use borrow material from sides of canals that has been dumped after excavation/ de-silting.	NA		

Subject	EMP Requirement	Compliance Attained	Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
Excavation of sites and opening of borrow pits	• If borrow pits essential. to be approved by PNPC and Ministry of Geology	NA		
	• Borrow pits to be closed and landscaped.	NA		
	• Stockpile excavated materials alongside open trench for backfilling; use for road formation	NA		
	• Replace excavated material and landscape the area.	NA		
	• Remove all waste and unused pipes.	NA		
Rehabilitation activities during cropping season	• Undertake pump station construction, rehabilitation planning and arranging to supply the minimum water requirements.	NA		
	• 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	NA		
Removal and disposal of debris	• Debris to be dumped in land fill sites approved by Oblast Gospropridom & Hokimiyat	NA		
	• Sell metal-based scrap and equipment to scrap dealers in Alat and Bukhara;	NA		
	• Land fill sites to be closed and rehabilitated	NA		
	• Old rising main pipes to be removed and disposed or recycled	NA		
	• Any electrical equipment found to contain PCBs is to be disposed of in accordance with Gozecoexpertisa requirements:	NA		
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	NA		
	• Bund fuel tank storages to 110% of tank capacity. Refuel vehicles and equipment 20 m away from water courses	NA		
	• Dispose of used oil and oil filters to meet accepted industry procedures	NA		
	• Accidental spill handling action (contingency) plan	NA		
Noise from construction equipment; e.g., jack hammers, air compressors	• Equipment fitted with approved sound suppression equipment and maintained	NA		
	• Operators provided with ear protection	NA		
	• Limit activities to daylight hours	NA		
Dust	• contractor to provide water tanker or necessary provisions	NA		
	• contractor to spray water on work areas and roads as required	NA		
	• Contractor to implement workplace safety awareness program.	NA		

Subject	EMP Requirement	Compliance Attained	Comment on Reasons for Partial or Non-Compliance	Required Action and Target Dates to Achieve Compliance
Worker Health and Safety	• Workers to be provided with safety equipment and instructed in its use.	NA		
	• Emergency accident -contingency plan	NA		
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	NA		
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.	NA		
	• Contractor attends to repair all damaged infrastructure/ roads, if needed. with relevant authorities (Hokimiyat);	NA		
Rehabilitation and closing of construction sites	• Remove all waste and contaminated soil	NA		
	• Restore sites by replacing topsoil and re-vegetating area	NA		
	• Final payment may be withheld until work is completed	NA		
Inspection and acceptance of construction works before handing over	• Inspection and signed acceptance by Operating Personnel	NA		Works have been completed in 2021. Repetition of the Functional Guarantee Tests is awaited to initiate Operational Acceptance Procedure

Table 5-24. Implementation Status of EMP during the POST-CONSTRUCTION, OPERATIONS PHASE (INCLUDING DEFECT LIABILITY PERIOD) (Package 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>
[1] i. Regular maintenance of infrastructure ii. Regular maintenance of oil and water separators.	<ul style="list-style-type: none"> Pump house & irrigation canals i. Arrange maintenance training programs. ii. Evaluate training programs iii. Arrange irrigation canal and drainage channel maintenance programs iv. Arrange budgets for maintenance. v. Check that oil and water separators are being properly maintained 	Yes	-	-
[2] Maintenance of land productivity	<ul style="list-style-type: none"> Irrigated Lands Prevent re-use of poor quality drainage water (containing more than 3 g/l mineralization) for irrigation; increase irrigation efficiency by avoiding over-use of irrigation water; enhance drainage in areas with high ground water tables; and regular maintenance of all drainage canals Crop rotation including green manure and introduction of current agricultural practices such as mineral fertilizers applied in a timely fashion, use of improved seed varieties, etc. to enhance fertility and productivity 	Yes	-	-
[3] Worker Safety Plan for those involved in irrigation system O&M	<ul style="list-style-type: none"> Pump house Implement Worker Safety Plan 	Not relevant since it is not a pump station contract	-	-
[4] Maintenance of pump house cleanliness and sanitation	<ul style="list-style-type: none"> Pump House Maintenance of water-seal toilets with periodic emptying of cesspits; Waste disposed according to the recommendations of the District Sanitary Epidemic Station either to the regional dump yards, for recycling or re-use depending on the category; Maintenance of a dedicated warehouse for waste such as mercury pollutants (luminescent lamps) for recycling (demercurization) through registered companies. 	Not relevant since it is not a pump station contract	-	-
[5] Abstraction of river water exceeding the allowable amount	<ul style="list-style-type: none"> At the Intake and the Pump House Adherence to international agreements 	Not relevant since it is not a pump station contract	-	-

5.4 Complaints

115. No complaints received during the reporting period.

Table 5-25. Summary of Complaints received during the monitoring period (and the ones pending since the previous monitoring period(s))

Details of Complaint	Complainant*	Received			Actions (to be) taken with the target date	Resolution Status***
		Through*	by whom**	date		
None	n/a	n/a	n/a	n/a	n/a	n/a

*Resident, NGO (non-governmental organization), etc.

**Verbally, letter, complaint box, email, etc.

***Contractor, supervision consultant or implementing/executing agency

****Open or Closed (If closed include date)

6 SUMMARY AND RECOMMENDATIONS

6.1 Summary

116. During the current reporting period (January - June 2022) the following environmental safeguard activities have been performed:

- Environmental, health and safety trainings and measures related to COVID-19 such as testing, distributing hand sanitizer, distributing face mask etc. by PIU supervision team and Contractors.
- Routine daily site visits by Site Engineers of Supervision Consultant including environmental, occupational health and safety issues.
- Inspection of the conditions of the Project sites by the national EEC in June 2022.

117. The Contractor of Amu Bukhara 1 New Pump Station (ABISRP 01) submitted EMR, conducted trainings, monitored environmental and health and safety conditions regularly during reporting period. Besides, due to prompt response of the Contractor to the nonconformities observed by the CSC, environmental performance of the Contractor is considered to be satisfactory.

118. The Contractor of Amu Bukhara Main Canal Regulation Structures (ABISRP 02) prepared the SSEMP just to fulfil its contractual obligations. The Contractor's SSEMP was approved on February 15, 2017. However, the Contractor, for a long time, acted as if he was unaware of existence of SSEMP and did not submit EMR regularly. In the reporting period, the Contractor submitted EMR only once for the period January-May 2022 which does not include any specific information regarding environmental, health and safety monitoring activities. The Contractor's environmental performance is considered to be poor.

119. The works at both pump stations of Contract ABISRP 03 were substantially completed in 2021 and there are only a few labors at site to eliminate the deficiencies and to keep the pump stations in operable condition. CSC will issue a "Post-Construction Environmental Audit Report" for this Contract, soon.

120. The issues identified during this monitoring period are summarized in Table 6-1. In this reporting period, 14 nonconformities were observed, of which 10 nonconformities were eliminated, the observed nonconformities were duly registered. All discrepancies will be reflected in the next reporting period.

Table 6-1. Issues Identified During the Monitoring Period (including the pending issues from the previous report(s))

Issue	Required Action	Responsibility	Timing (Target Dates)	Status as of 05.08.2022
1. The Contractor has no record about the type, quantity of solid waste produced and disposed (pending from previous SAEMR #13)	Keep a log regarding every kind of wastes generated at site	Contractor (ABISRP 02)	15.06.2022	OPEN
2. Lack of a specific place for the storage of construction waste (uncontrolled storage of timber of used formwork and residual scraps of metal formwork elements) at the construction site	Designate a temporary location at site (e.g., on the north-eastern part of the pumping station excavation pit) using a fencing in the form of signal tape and store relevant construction waste there	Contractor ABISRP 01	15.07.2022	CLOSED
3. Lack of waste bins for general waste (plastic bottles of drinks, gloves, general rubbish) of workers at the construction site	Provide plastic bins to collect waste and conduct training on "Waste collection and storage at the construction site" to the workers	Contractor ABISRP 01	15.07.2022	CLOSED
4. Inadequate dust suppression, especially on the windy days	Perform wet dust suppression at construction site at least 2 times per shift	Contractor ABISRP 01	15.07.2022	CLOSED
5. Lack of a secondary containment vessel of the diesel fuel storage tank to protect against emergency leakage and soil contamination	Rise the diesel fuel storage tank up on a concrete pond	Contractor ABISRP 01	30.09.2022	IN PROGRESS
6. Inadequate use of PPE for those working with hot bitumen, lack of a fire extinguisher where the bitumen is boiled	Provide the workers with overalls, safety shoes, special gloves and other PPE to avoid burns while working with hot bitumen Provide at least one fire extinguisher to the place where the bitumen is boiled	Contractor ABISRP 01	15.07.2022	CLOSED
7. Not using PPE (safety harness) when working at height on the scaffolding	Provide the workers working on scaffolding with safety harnesses and make sure workers use these safety harnesses	Contractor ABISRP 01	15.07.2022	CLOSED
8. Inadequate use of PPE for those working at pipeline fabrication site	Provide the workers with special shoes with Impact Resistant Toe to prevent damage to the feet Provide the workers carrying out welding work in confined spaces with a respirator to avoid vapor poisoning during welding	Contractor ABISRP 01	15.07.2022	CLOSED
9. Absence of firefighting equipment at construction site and temporary camp (Hydrosystem Troynik)	Provide the construction site and temporary camp with firefighting equipment	Contractor ABISRP 02	05.08.2022	CLOSED
10. Spilling of concrete residues on the ground adjacent to the construction site (Hydrosystem Troynik)	Remove all the concrete residues. Concrete pumps will not be allowed to stop or operate where out of concrete pouring areas	Contractor ABISRP 02	01.08.2022	CLOSED
11. Lack of fence around the deep construction pit (Hydrosystem Troynik)	Fence the deep construction pit with signal tape and putting hard barriers where needed.	Contractor ABISRP 02	05.08.2022	CLOSED
12. Inadequate housekeeping and maintenance of the temporary camp territory of KMPS	Waste disposal on timely basis and Housekeeping regularly on the territory basis. Personnel training to be conducted to increase environmental awareness	Contractor ABISRP 03 Lot 1	05.08.2022	CLOSED

Amu Bukhara Irrigation System Rehabilitation Project
 Environmental Monitoring Report (January - June 2022)

Issue	Required Action	Responsibility	Timing (Target Dates)	Status as of 05.08.2022
13. The last SAEMR #13 (for Jul-Dec 2021) has not been disclosed on MWR's website yet.	PIU to organize disclosure job of SAEMR 13 by MWR	PIU	30.09.2022	OPEN
14. No training record by ABISRP 02 Contractor	All training records should be kept	Contractor ABISRP 02	30.10.2022	OPEN
15. Monthly environmental monitoring report by ABISRP 02 Contractor not submitted on the monthly basis	EMR should be submitted to CSC on the monthly basis	Contractor ABISRP 02	30.12.2022	OPEN

6.2 Recommendations

121. Routine supervision activities need to be performed by all parties to ensure that EMP of the project, SSEMPs of Contractors have been successfully implemented and environmental safeguard obligations have been fulfilled.

Annex 1. Photos



Installation Works of the Volute (Spiral) Casings of the Main Pumps (ABISRP 01)

All photos are taken in the months of January, February, April 2022



Structural Concrete Works for the Underground Part (Substructure) of the Pump Station Building (ABISRP 01)

All photos are taken in the months of January, February, April 2022



Structural Concrete Works for the Underground Part (Substructure) of the Pump Station Building (ABISRP 01)

All photos are taken in the months of April, June 2022



Manufacturing of Discharge Pipes at the Workshop at Site (ABISRP 01)
All photos are taken in the months of March, June 2022



**Completion of Rehabilitation Works on Outflow-Tudakul at Hydrosystem Prokop
(ABISRP 02)**

All photos are taken in the months of March, April 2022



Construction of the Bypass Structure ABK-1 at Hydrosystem Troynik (ABISRP 02)
All photos are taken in the months of May, June 2022



Construction of the Bypass Structure ABK-2 at Hydrosystem Troynik (ABISRP 02)
All photos are taken in the months of May, June 2022



Defect Elimination on Sediment Basin at Kuyu Mazar Pump Station (ABISRP 03 Lot 1)
All photos are taken in the month of June 2022



Repetition of Functional Guarantee Tests of Main Pumps at Kizil Tapa Pump Station
(ABISRP 03 Lot 2)
All photos are taken in the month of March 2022



Photos from Training at AB-1 New PS (ABISRP 01)
All photos are taken in the month April 2022

Annex 2. A Few Examples of OHS and COVID-19 Training Records (ABISRP 01)

Фамилия, имя, отчество инструктируемого	Профессия, должность	Вид инструктажа (первичный, периодический, внеочередной, разовый)	Тема инструктажа (вопросы по которым проводится инструктаж № инструкции)	Подпись инструкти- руемого	Инструктаж на рабочем месте прощё		Дата веденного инструктажа
					Фамилия, И. О.	Подпись	
Туллатов Шамшир	шени	Повторный инс/ксо	COVID-19	Вейит	Бекмуродов И	Вейит	07.2021
Широб Хаиро	шени(жс)	Повторный инс/ксо	Карантин	Вейит	Бекмуродов И	Вейит	07.2021
Туллатов Абдикул	шени(жс)	Повторный инс/ксо	маршиб конда	Вейит	Бекмуродов И	Вейит	07.2021
Абдуллаев Абдос	Электрик	Повторный инс/ксо	парн	Вейит	Бекмуродов И	Вейит	07.2021
Маджидов Шамсид	шени	Повторный инс/ксо	COVID-19	Вейит	Бекмуродов	Вейит	07.2021
Рахмонов Мармур	шени	Повторный инс/ксо	Карантин	Вейит	Бекмуродов	Вейит	07.2021
Рахмонов Шамсид	шени	Повторный инс/ксо	маршиб конда	Вейит	Бекмуродов	Вейит	07.2021
Рахмонов Санжар	шени	Повторный инс/ксо	маршиб конда	Вейит	Бекмуродов	Вейит	07.2021
Бекмуродов Калалар	шени	Повторный инс/ксо	парн	Вейит	Бекмуродов	Вейит	07.2021
Содилов Садрор	шени	Повторный инс/ксо	COVID-19	Вейит	Бекмуродов	Вейит	07.2021
Абдуллаев Кудрат	шени	Повторный инс/ксо	Карантин	Вейит	Бекмуродов	Вейит	07.2021
Кабиров Сабир	шени	Повторный инс/ксо	маршиб конда	Вейит	Бекмуродов	Вейит	07.2021
Абдуллаев Хаван	шени	Повторный инс/ксо	парн	Вейит	Бекмуродов	Вейит	07.2021
Рахмонов Садрор	шени	Повторный инс/ксо	COVID-19	Вейит	Бекмуродов	Вейит	07.2021
Абдуллаев Шират	шени	Повторный инс/ксо	Карантин	Вейит	Бекмуродов	Вейит	07.2021
Рахмонов Рахдор	шени	Повторный инс/ксо	маршиб конда	Вейит	Бекмуродов	Вейит	07.2021
Рахмонов Шерхон	шени	Повторный инс/ксо	парн	Вейит	Бекмуродов	Вейит	07.2021
Абдуллаев Эркин	шени	Повторный инс/ксо	COVID-19	Вейит	Бекмуродов	Вейит	07.2021
Абдуллаев Рахмон	шени	Повторный инс/ксо	Карантин	Вейит	Бекмуродов	Вейит	07.2021
Абдуллаев Шамур	шени	Повторный инс/ксо	маршиб конда	Вейит	Бекмуродов	Вейит	07.2021
Бекмуродов Абас	шени	Повторный инс/ксо	COVID-19	Вейит	Бекмуродов	Вейит	07.2021
Абдуллаев Рахмон	шени	Повторный инс/ксо	Карантин	Вейит	Бекмуродов	Вейит	07.2021
Абдуллаев Эркин	шени	Повторный инс/ксо	маршиб конда	Вейит	Бекмуродов	Вейит	07.2021
Абдуллаев Халил	шени	Повторный инс/ксо	COVID-19	Вейит	Бекмуродов	Вейит	07.2021
Абдуллаев Рахмон	шени	Повторный инс/ксо	Карантин	Вейит	Бекмуродов	Вейит	07.2021

Amu Bukhara Irrigation System Rehabilitation Project
Environmental Monitoring Report (January - June 2022)

№ п/п	Фамилия, имя, отчество инструктируемого	Профессия, должность	Вид инструктажа (первичный, периодический, внеочередной, разовый)	Тема инструктажа (вопросы по которым проводится инструктаж № инструкции)	Подпись инструктируемого	Инструктаж на рабочем месте прошёл	
						Фамилия, И. О.	Подпись
1	Окчиев Назир	шляк	Плановый инс/жа	COVID-19	Бекмуродов	Бекмуродов	Бекмуродов
2	Ториев Абду	шляк	Плановый инс/жа	Карантин	Бекмуродов	Бекмуродов	Бекмуродов
3	Нарзуллаев Хусниддин	шляк	Плановый инс/жа	тирний	Бекмуродов	Бекмуродов	Бекмуродов
4	Рахимова Дилшод	шляк	Плановый инс/жа	кондалари	Бекмуродов	Бекмуродов	Бекмуродов
5	Ториев Шокир	шляк	Плановый инс/жа	тирний	Бекмуродов	Бекмуродов	Бекмуродов
6	Тулпиев Омарбек	шляк	Плановый инс/жа	COVID-19	Бекмуродов	Бекмуродов	Бекмуродов
7	Хашимов Рахмон	шляк	Плановый инс/жа	Карантин	Бекмуродов	Бекмуродов	Бекмуродов
8	Нурмуродов Валерий	Кранчи	Плановый инс/жа	тирний	Бекмуродов	Бекмуродов	Бекмуродов
9	Нарзуллаев Шахмат	бригадир	Плановый инс/жа	кондалари	Бекмуродов	Бекмуродов	Бекмуродов
10	Сайидов Востан	бригадир	Плановый инс/жа	тирний	Бекмуродов	Бекмуродов	Бекмуродов
11	Рахимова Рахмон	шляк	Плановый инс/жа	COVID-19	Бекмуродов	Бекмуродов	Бекмуродов
12	Шарифов Фаррух	шляк	Плановый инс/жа	Карантин	Бекмуродов	Бекмуродов	Бекмуродов
13	Аббасов Собир	шляк	Плановый инс/жа	тирний	Бекмуродов	Бекмуродов	Бекмуродов
14	Курбанов Рахмон	шляк	Плановый инс/жа	кондалари	Бекмуродов	Бекмуродов	Бекмуродов
15	Халимов Сагир	шляк	Плановый инс/жа	тирний	Бекмуродов	Бекмуродов	Бекмуродов
16	Маджидов Бахтиёр	шляк	Плановый инс/жа	COVID-19	Бекмуродов	Бекмуродов	Бекмуродов
17	Аббасов Санжар	шляк	Плановый инс/жа	Карантин	Бекмуродов	Бекмуродов	Бекмуродов
18	Рахимова Омарбек	шляк	Плановый инс/жа	тирний	Бекмуродов	Бекмуродов	Бекмуродов
19	Рахимова Элдик	ошпаз	Плановый инс/жа	кондалари	Бекмуродов	Бекмуродов	Бекмуродов
20	Рахимова Омарбек	ошпаз	Плановый инс/жа	тирний	Бекмуродов	Бекмуродов	Бекмуродов
21	Рахимова Рахмон	ошпаз	Плановый инс/жа	COVID-19	Бекмуродов	Бекмуродов	Бекмуродов
22	Рахимова Рахмон	шляк	Плановый инс/жа	Карантин	Бекмуродов	Бекмуродов	Бекмуродов
23	Рахимова Сагир	шляк	Плановый инс/жа	тирний	Бекмуродов	Бекмуродов	Бекмуродов
24	Рахимова Рахмон	шляк	Плановый инс/жа	кондалари	Бекмуродов	Бекмуродов	Бекмуродов
25	Рахимова Рахмон	шляк	Плановый инс/жа	тирний	Бекмуродов	Бекмуродов	Бекмуродов

Amu Bukhara Irrigation System Rehabilitation Project
Environmental Monitoring Report (January - June 2022)

Дата проведенного инструктажа	Фамилия, имя, отчество инструктируемого	Профессия, должность	Вид инструктажа (первичный, периодический, внеочередной, разовый)	Тема инструктажа (вопросы по которым проводится инструктаж № инструкции)	Подпись инструктируемого	Инструктаж на месте работы
						Фамилия, И. О.
16.03.2022	Бурбанов Ридванбек	Ишги	Повторный инструктаж	Электр энергия	Бекмуродов	Бекмуродов Х
16.03.2022	Тотиев Сафдор	Ишги	Повторный инструктаж	ва техника каар	Бекмуродов	Бекмуродов Х
16.03.2022	Кулдошев Муслим	Ишги	Повторный инструктаж	сизими конун	Бекмуродов	Бекмуродов Х
16.03.2022	Саабборов Ридванбек	Ишги	Повторный инструктаж	кондалар	Бекмуродов	Бекмуродов Х
16.03.2022	Мухамедов Зилдан	Ишги	Повторный инструктаж	Электр энергия	Бекмуродов	Бекмуродов Х
16.03.2022	Рахимолов Сайит	Ишги	Повторный инструктаж	ва техника	Бекмуродов	Бекмуродов Х
16.03.2022	Камратов Бодир	Ишги	Повторный инструктаж	хафизими	Бекмуродов	Бекмуродов Х
16.03.2022	Ахмедов Мирод	Ишги	Повторный инструктаж	конун кондалар	Бекмуродов	Бекмуродов Х
16.03.2022	Илматов Фарид	Ишги	Повторный инструктаж	Электр энергия	Бекмуродов	Бекмуродов Х
16.03.2022	Ермошев Бекзод	Ишги	Повторный инструктаж	ва техника каар	Бекмуродов	Бекмуродов Х
16.03.2022	Муратов Мавлон	Ишги	Повторный инструктаж	сизими конун	Бекмуродов	Бекмуродов Х
16.03.2022	Курбанов Сайид	Ишги	Повторный инструктаж	кондалар	Бекмуродов	Бекмуродов Х
16.03.2022	Ибрагимов Обид	Ишги	Повторный инструктаж	Электр энергия	Бекмуродов	Бекмуродов Х
16.03.2022	Хажиев Абдул	Ишги	Повторный инструктаж	ва техника	Бекмуродов	Бекмуродов Х
16.03.2022	Рахмонов Илтим	Ишги	Повторный инструктаж	хафизими	Бекмуродов	Бекмуродов Х
16.03.2022	Талатов Мавлон	Ишги	Повторный инструктаж	конун кондалар	Бекмуродов	Бекмуродов Х
16.03.2022	Маматов Захриддин	Ишги	Повторный инструктаж	Электр энергия	Бекмуродов	Бекмуродов Х
16.03.2022	Ридван Маматов	Ишги	Повторный инструктаж	ва техника	Бекмуродов	Бекмуродов Х
16.03.2022	Рахимов Абдул	Ишги	Повторный инструктаж	хафизими	Бекмуродов	Бекмуродов Х
24.03.2022	Ридван Мирод	Ишги	Повторный инструктаж	конун кондалар	Бекмуродов	Бекмуродов Х
24.03.2022	Султонов Фарид	Ишги	Повторный инструктаж	Электр энергия	Бекмуродов	Бекмуродов Х
24.03.2022	Маматов Абдул	Ишги	Повторный инструктаж	ва техника	Бекмуродов	Бекмуродов Х
24.03.2022	Худайбердиев Азиз	Ишги	Повторный инструктаж	хафизими	Бекмуродов	Бекмуродов Х
24.03.2022	Ридван Учкун	Ишги	Повторный инструктаж	конун	Бекмуродов	Бекмуродов Х
24.03.2022	Ридван Учкун	Ишги	Повторный инструктаж	кондалар	Бекмуродов	Бекмуродов Х

Amu Bukhara Irrigation System Rehabilitation Project
Environmental Monitoring Report (January - June 2022)

Дата проведения инструктажа	Фамилия, имя, отчество инструктируемого	Профессия, должность	Вид инструктажа (первичный, периодический, внеочередной, разовый)	Тема инструктажа (вопросы по которым проводится инструктаж № инструкции)	Подпись инструктируемого	Инструктаж на рабочем месте прошёл	
						Фамилия, И. О.	Подпись
24.03.2022	Мамжиев Фуркат	Ишги	Плановый инс/жа	Электр энергия	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
24.03.2022	Нарзуллаев Бунят	Ишги	Плановый инс/жа	ва Техника	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
24.03.2022	Хайратов Перуз	Ишги	Плановый инс/жа	хаор сиушми	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
24.03.2022	Коралив Азизбек	Ишги	Плановый инс/жа	конун коидлар	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
24.03.2022	Байтаев Фарух	Ишги	Плановый инс/жа	Электр энергия	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
24.03.2022	Мамиев Дилмурод	Ишги	Плановый инс/жа	ва Техника	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
24.03.2022	Курбанкулов Давлат	Ишги	Плановый инс/жа	хаор сиушми	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
24.03.2022	Байтаев Сузбек	Ишги	Плановый инс/жа	конун	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
24.03.2022	Хотамов Абдугафур	Ишги	Плановый инс/жа	коидлар	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
24.03.2022	Курбанов Кофар	Ишги	Плановый инс/жа	Электр энергия	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
24.03.2022	Назриддинов Шухрат	Ишги	Плановый инс/жа	ва Техника	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
24.03.2022	Муратов Камил	Ишги	Плановый инс/жа	хаор сиушми	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
24.03.2022	Мамиев Озод	Ишги	Плановый инс/жа	конун	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
24.03.2022	Бахронов Перуз	Ишги	Плановый инс/жа	коидлар	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
25.03.2022	Касимов Зомир	Ишги	Плановый инс/жа	Электр энергия	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
25.03.2022	Касимов Эмбек	Ишги	Плановый инс/жа	ва Техника	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
25.03.2022	Касимов Исмаилов	Ишги	Плановый инс/жа	хаор сиушми	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
25.03.2022	Тоқоқов Фаиз	Ишги	Плановый инс/жа	конун коидлар	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
30.03.2022	Эргашев Мадрохим	Ишги	Плановый инс/жа	Электр энергия	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
30.03.2022	Курбанов Перуз	Ишги	Плановый инс/жа	ва Техника	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
31.03.2022	Уминов Фуад	погрузчик	Плановый инс/жа	хаор сиушми	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
31.03.2022	Акрамов Садулло	Шофёр	Плановый инс/жа	конун	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
31.03.2022	Рахматов Фаридат	Ишги	Плановый инс/жа	коидлар	<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
03.04.2022	Хурраев Эркин	Ишги	Плановый инс/жа		<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>
03.04.2022	Убайев Зафар	Ишги	Плановый инс/жа		<i>Бекмуродов</i>	Бекмуродов X	<i>Бекмуродов</i>