# Semi-Annual Environmental Monitoring Report

# #16 Semiannual Report

(Reporting Period: January-June 2024)

Loan Number: 3238 - GEO Project Number: 43405-025

GEORGIA: URBAN SERVICES IMPROVEMENT INVESTMENT PROGRAM

(TRANCHE 3)

(FINANCED BY THE ASIAN DEVELOPMENT BANK)

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**For:** The Ministry of Regional Development and Infrastructure of Georgia

and the Asian Development Bank

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Protection and Social Affairs, "United Water Supply Company of

Georgia"

# **ABBREVIATIONS**

ADB	Asian Development Bank
CAP	Corrective Action Plan
DC	Design Consultant
DPPASA	Department of Permits, Environmental protection and Social Affairs
DDR	Due Diligence Report
EA	Executing Agency
EARF	Environmental Assessment and Review Framework
EHS	Environmental Health & Safety
EIA	Environmental Impact Assessment
EIP	Environmental Impact Permit
EMP/	Environmental Management Plan/ Site-Specific Environmental Management
SSEMP	Plan
ES/ SES	Environmental Specialist/ Senior Environmental Specialist
GoG	Government of Georgia
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
IPMO	Investment Program Management Office
IA	Implementing Agency
IEE	Initial Environmental Examination
LLC	Limited Liability Company
MFF	Multi-tranche Financing Facility
MoEPA	Ministry of Environment Protection and Agriculture
MoRDI	Ministry of Regional Development & Infrastructure
NEA	National Environmental Agency
PMD	Projects Management Department
SAEMR	Semi-Annual Environmental Monitoring Report
SC	Supervision Consultant
USIIP	Urban Sector Improvement Investment Program
UWSCG	United Water Supply Company of Georgia
WS	Water Supply
WSS	Water Supply & Sewerage
WWTP	Waste Water Treatment Plant

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# I. INTRODUCTION

#### 1.1 Preamble

- This report represents the Semi Annual Environmental Monitoring Review (SAEMR) for "Urban Services Improvement Investment Program" (USIIP), Tranche 3 and describes the period of January-June 2024.
- 2. This report is the 17<sup>th</sup> Semi-annual EMR for the T3 of "Urban Services Improvement Investment Program".

#### 1.2 Headline Information

- 3. During the reporting period, within the framework of the subproject GUD-03: "Construction of four wastewater treatment plants in Gudauri," only minor construction work was carried out. During January-June 2024, the following works were completed: working on-site documents, checking the received electrical and mechanical equipment for Waste Water Treatment Plans and working on sewerage Discharge Pipe Design Section from WWTP-4 to Aragvi River.
- **4.** Existing status of other projects are provided below:

#### **Tranche 3 of the Investment Program includes:**

- Construction of Water Supply and Wastewater Network in Ureki/Phase 3 (URE-01), project completion date is September 2019 (additional information is provided in para 8-10 below);
- Construction of Wastewater Treatment Plant in Ureki (URE-02), project completion date is June 2018 (additional information is provided in para 11-14 below);
- Construction and Rehabilitation of Water Supply System in Kutaisi/Phase 2 (KUT-01), project completion date is June 2018 (additional information is provided in para 14-16 below);
- Construction of New Transmission Pipeline in Abasha (ABA-01), project completion date is March 2020 (additional information is provided in para 21-22 below).

# 2. PROJECT DESCRIPTION AND CURRENT ACTIVITIES

# 2.1 Project Description

- 5. The Urban Services Improvement Investment Program was developed as the Government's response to the lack of adequate and/or safe water supply, sewerage and sanitation in urban areas of Georgia. This is intended to optimize social and economic development in selected urban areas through improved urban water and sanitation services, and is financed by the ADB through its Multi-tranche Financing Facility. The Ministry of Regional Development and Infrastructure is the Executing Agency and the "United Water Supply Company of Georgia", LLC is the Implementing Agency of the Investment Program. UWSCG is a 100% state-owned company.
- 6. The Investment Program improves infrastructure through the development, design and implementation of a series of subprojects, each providing improvements in a particular sector (water supply and/or sanitation) in one town. Sub-projects rehabilitate existing infrastructure and/or create new and expanded infrastructure to meet the present and future demand. Water supply improvements include source augmentation and head works, pumping systems, treatment facilities, transmission and distribution network; and, sewerage improvement works include sewer network, pumping stations, main collectors and waste water treatment plants.

#### 7. Tranche 3 of the Investment Program includes:

- Construction of Water Supply and Wastewater Network in Ureki/Phase 3 (URE-01);
- Construction of Wastewater Treatment Plant in Ureki (URE-02);
- Construction and Rehabilitation of Water Supply System in Kutaisi/Phase 2 (KUT-01):
- Construction of New Transmission Pipeline in Abasha (ABA-01);
- Construction of Waste Water Treatment Plants in Gudauri (GUD-03).

#### The following projects are financed under Tranche 3:

- 8. 1Construction of Water Supply and Wastewater Network in Ureki/Phase 3 (URE-01). The project comprised of the construction of 1 water supply pumping station and 31 sewage pumping stations (Shekvetili 18, Ureki 13; construction of new reservoirs (2,000 m³ x 3,000 m³ and 1 x 1,200 m³); Distribution network laying of approximately 70 km water supply pipelines (distribution network will be divided into 3 areas), laying of approximately 70 km sewage pipelines; installation of approximately 1,500 water meters; Wells drilling of 10 drinking water wells.
- 9. The Contract was signed with JV of Peri Ltd (Georgia) Leading Partner and Slon LLC (Azerbaijan) on October 28, 2014. Project commencement date was November 24, 2014. Initial Completion date was scheduled on November 22, 2018 but due to changes in the design of project, which include the construction of an Aqueduct across the Natanebi River, the construction of Gabion wall to protect well fields from flooding and erosion, and the construction of an additional deep well N8 along the banks of the Natanebi River. Project completion date is September 2019. The project is foreseen to serve 35,000 tourists and 5,400 local inhabitants by year 2040.
- 10. The Post Cosntruction Environmental Audit report under the URE-01 sub-project was prepared by the Supervisory Consultant EPTISA after completion of the construction work in June 2021 and approved by UWSCG.

<sup>&</sup>lt;sup>1</sup> T1-T3 BAEMRs may have some overlap, due to the financing arrangements of Ure-01 project, which is simultaneously financed by T1,T2 and T3.

- **11. Construction of Wastewater Treatment Plant in Ureki (URE-02).** The project comprised of the construction of new Wastewater Treatment Plant with the capacity of 6,570 m³/day.
- 12. The contract URE-02 was signed on April 30, 2015 with JV of Ludwig Pfeiffer Hoch-und Tiefbau GmbH and Co.KG ProtechnoSrl (Germany) / Aritim (Turkey), the contract was completed on June 9, 2018.
- 13. The Post Cosntruction Environmental Audit report under the URE-02 sub-project was prepared by the Supervisory Consultant EPTISA after completion of the construction work in June 2019 and approved by UWSCG.
- **14. Construction and Rehabilitation of Water Supply System in Kutaisi/Phase 2 (KUT-01).** The project envisaged construction of Kvitiri 973 m³/h capacity and Mukhrani 660 m³/h capacity pumping stations; Reservoirs construction of Near East and Mukhrani reservoirs with the capacity of 9,000 m³ (2x4,000+1,000). Distribution network 332.1 km.
- 15. United Water Supply Company of Georgia signed a contract with SMK Ulusal Insaat Ve Ticaret A.S. (Turkey) for implementation of KUT-01 project on 22 April 2015. The initial date of completion of the contract was June 8 2018, the contract was extanded and completed in July 2020.
- **16.** The Post Cosntruction Environmental Audit report under the KU-01 sub-project was prepared by the Supervisory Consultant EPTISA in June 2021 and approved by UWSCG.
- **17. Construction of Waste Water Treatment Plants in Gudauri (GUD-03).** The Proposed project envisages construction of 5 Waste Water Treatment Plants with different sizes but using the same technological process:
  - New Gudauri. The new development in the north of Gudauri (ab. 750 m³/day) and Gudauri Heights (350 m³/day).
  - Upper and Central Gudauri: Located at the same site that the old WWTP, near the church (estimated up to 2000 m³/day).
  - Gudauri Downtown. In the head of the big plot of the plateau, down the downtown. (ab. 350 m³/day).
  - Plateau-Lower Gudauri. At the end of the plateau for the new development (ab. 750 m³/day).
  - Seturebi. One plant to treat the water in Seturebi village (ab. 350 m<sup>3</sup>/day).
- 18. The Contract was signed on June 3, 2019 with "China Nuclear Industry 23 Construction Co." LTD (CNI23). The initial date of completion of the GUD-03 sub-project was April 2021. The deadline for implementation of GUD-03 subproject was extended until November 2023. Currently, GUD-03 project completion date has expired and the sub-project is in delay damages period until the end of September 2024. All activities related to the completion of the GUD-03 subproject after loan closing date 29 March 2024, will be financed with the government funds. All future contracts aimed for completion of the outputs under USIIP MFF financed by the Government, should be implemented in accordance with ADB SPS 2009.

# Exclusion of WWTP N5 from the GUD-03 sub-project

19. On December 24, 2019, Ms. Lida Seturidze lodged a complaint about the planned construction of Wastewater Treatment Plant (WWTP) No. 5 on her ancestral land, which houses 90-year-old pear trees. A public consultation meeting on December 27 aimed to address community concerns about the GUD-03 sub-project, including the Grievance Redress Mechanism (GRM) and Ms.Seturidze's case. Seturidze voiced her concerns and was encouraged to formally register her complaint.

- 20. The Grievance Redress Committee reviewed her complaint but deemed relocation of the plant infeasible due to project timelines and legal requirements. To mitigate potential misuse of complaints, they excluded certain work areas from the project and subsequently canceled the construction of WWTP No. 5, leaving the site undisturbed.
- 21. In December 2023, Change Order No. 1 was sent to ADB with a proposal to make changes in the GUD-03 sub-project, to exclude WWTP No. 5 from the sub-project. additional information about the Ms. Lida Seturidze's case is presented in Annex D below.
- 22. The Post-construction Environmental Audit of the GUD-03 sub-project will be carried out in September 2024 by the Supervision Consultant EPTISA and the Post-construction Environmental Audit report will be reflected in the next Semi-annual EMR of July-December 2024.
- 23. Construction of New Transmission Line in Abasha (ABA-01). Within the Aba-01 sub-project the following major works were carried out: approximately 15 km long 500 mm diameter transmission pipeline was installed from headworks to the town of Abasha, chlorination building was constructed and the water meters were installed at the headwork. The Abasha Service Center was built and the SCADA system was installed from the water flow meter chamber to the chlorination room.
- 24. The contract for implementation of ABA-01 was signed on October 13, 2017 with AS Inshaat–N, LLC (Azerbaijan). The original project completion date for the project was March 14 2020. The project completion date then was extended until the June 18 2022. Currently, All construction activities under ABA-01 sub-project are completed, the official completion day has expired and the sub-project is in delay damages period until the end of July 2024.

#### **Post-construction Environemntal Audit Report**

- 25. The Post-construction Environmental Audit of the ABA-01 sub-project was conducted in April 2024 by the Supervision Consultant EPTISA and the first draft of the Post-construction Audit Report (please see Annex E below) was submitted to UWSCG in April 2024 and the document was further updated in June 2024 based on the progress of Corrective Actions.
- 26. Details regarding the observed non-compliances are presented in Table N1 below. These non-compliances primarily pertain to the storage and management of hazardous and non-hazardous waste, which were mixed and uncontrollably disposed of within the service center's premises. All identified non-compliances have been rectified within the stipulated deadlines and are documented in the table below, accompanied by corresponding improved photographs. There are no more any pending issues remained and all non-compliances have been resolved and closed.

Table 1: Non-compliances and observation fixed during the Post-Construction Environmental Audit and Progress of Required Actions

#	Non-	Required action and term	Responsible	Progress of Corrective
	compliance/Observation		person	Actions
1	Non-compliance 1:	Hazardous waste must be	UWSCG	Improved, May June 2024
	Hazardous and non-	separated from existing waste		
	hazardous construction	and handled accordingly, please		
	waste mixed with each	see fig. 3,4,and 6 above		
	other is uncontrollably			
	dumped on the territory of			
	the service center, and			

#	Non- compliance/Observation	Required action and term	Responsible person	Progress of Corrective Actions
	there is a hazardous waste container as well.			
2	Non-compliance 2: Empty oxygen cylinders are placed unattended on the well site adjacent to the workshop	Term: 17 June 2024 Handling or temporary disposal of hazardous material containers shall be handled as hazardous waste, please see Fig. 19, 20 above	UWSCG	Improved, May 2024
		Term: 17 June 2024		
3	Observation 1: Puddles of water were observed at several locations near the central water main. Potable water may be leaking from the pipeline	Additional instrumental investigations should be conducted to determine the cause of the water puddles, please see Fig. 9-12 above	UWSCG	Improved, May 2024
	at this location.	Term: end of July 2024		

# 2.2 Project Contracts and Management

29. The main institutions that are involved in implementation of the EMP are The Ministry of Regional Development and Infrastructure is the Executing Agency and the "United Water Supply Company of Georgia", LLC is the Implementing Agency of the Investment Program, Supervision Consultant (SC) the Contractor and to a lesser extent the Ministry of Environment Protection and Agriculture (MoEPA).

- 30. The Investment Program Management Office (IPMO) under UWSCG which was created in January 2011 and which is the Department of Management of Projects Financed by Donor Organizations, is responsible for the day-to-day management of the project, including the implementation of the EMP. IPMO has an Environmental Specialist, Ms.Ketevan Chomakhidze who is responsible for managing the environmental aspects of the USIIP. The acting head of the department is Mr.Davit Akhvlediani.
- **31.** The IPMO Environmental Specialist's responsibilities in respect of implementation of the EMP are as follows:
  - (i) Approve the Site Specific Environmental Management Plan (SSEMP) before Contractor takes possession of construction site;
  - (ii) Monitor implementation of EMP and ensure the environmental safeguards compliance:
  - (iii) Review the updated IEE and/or SEMP and send it for clearance to ADB;
  - (iv) Ensure that contractors have access to the EMP and IEE report;
  - (v) Finalize SAEMRs (and Final EMRs upon project completion), send it to ADB and address potential ADB's comments until SAEMR disclosure;
  - (vi) Review and approve the Corrective Action Plan and provide to ADB for review and comments if any;
  - (vii) Participate in public consultations during project implementation;
  - (viii) In case of need assist IPMO Social/Resettlement Consultant in resolving process of environmental safeguards related complaints;
  - (ix) Assist in organizing trainings for the Contractors in coordination with ADB/RETA consultant;
  - (x) Participate in external trainings in environmental management and environmental auditing
- 32. The SC includes a full time Environmental Specialist Mr.Irakli Legashvili to assist the IPMO oversee day-to-day implementation of EMPs by contractors, including compliance with all government rules and regulations; Support IPMO in the review and endorsement of contractor's SSEMP; Conduct inspections on contractor's implementation of SSEMP and compliance with government rules and regulations; Ensure contractors comply with health and safety requirements per approved SSEMP's Health and Safety Management Plan; Conduct investigations on grievances/complaints, incidents and accidents; Assist IPMO in addressing any grievances in a timely manner as per the GRM; Monitor corrective actions as required in CAPs, and ensure non-compliances are resolved immediately and are not occurring repeatedly; Prepare recommendations for contractors repeated non-compliances on safeguards and EHS requirements; Submit monthly and quarterly environmental monitoring reports to IPMO.
- 33. The Contractor also appoints a full time Environmental specialist under GUD-03 subproject Mr. Aleksandre (Sasha) Mchedlishvili to be a senior member of the construction management team based on site for the duration of the contract. Environmental Specialist of contractor is responsible for preparing the Specific Environmental Management Plan (SSEMP) for endorsement by Supervision Consultant and approval by the UWSCG prior to the Contractor taking possession of the construction site; ensuring the SSEMP is effectively throughout the implemented construction period; environmental accidents/incidents including resolution activities; non-compliance notifications issued by the SC; Corrective action plans issued to the SC in response to non-compliance notices; Community relations activities including maintaining complaints register; Routine reporting of SSEMP compliance and community liaison activities; Implement Occupational Health and safety requirements. Implement site clean-up measures after civil works finalization.
- **34.** Department of Permits, Environmental Protection and Social Affairs of UWSCG work together with IPMO on addressing the Environmental Safeguard issues of USIIP. The Head of Department is Ms.Maka Goderdzishvili. DPPASA have divisions of "Permits" and "Environemntal Protection and Social Affairs". Ms. Salome Mosidze is the head of

Environmental Protection and Social Affairs Devision. More detailed description of implementation arrangements; responsibilities and staffing are provided in the Table 2 below.

Table 2: Institutionnel Arrangement, Responsabilités and Staffing

#	Millstones/Actions	Contractor (Environmental Specialist)	Construction Supervision Consultant (Environmental Specialist)	IPMO (Environmental Specialist)	Department of Permits, Environmental Protection and Social Affairs (Environmental Specialist)
1	Environmental planning and management Contractors Environmental Management Plan (site- specific EMP)	Prepare Specific EMP (SEMP) with supplemented Topic Specific EMPs at pre- construction stage based on IEE/EMP Implement SEMP approved by IPMO.	Review and endorse the SEMP; Monitor implementation of SEMP on daily basis; Monitor monthly environmental monitoring reports or results prepared by the Contractor and report to IPMO.	Review and approve the SEMPs; Monitor implementation of EMP and ensure the environmental safeguards compliance.	Work together with IPMO on addressing the environmental noncompliance issues, if any.
2	Changes in design	Provide details of design changes to CSC required to update IEE/EIA, or SEMP; Implement updated SEMP.	Approve the design change to be submitted to IPMO; Make environmental assessment of the change and update the IEE and/or SEMP.	Review the updated IEE and/or SEMP and send it for clearance to ADB	Liaise with CSC in preparing updated IEE and/or SEMP; Upload the approved IEE/SEMP provided by IPMO to UWSCG website for Public Disclosure.
3	Unanticipated impacts	Inform CSC about unanticipated impact and follow the instructions received from IPMO.	Make environmental assessment of the unanticipated impact and update the IEE and/or SEMP	Review the updated IEE and/or SEMP and send it for clearance to ADB	Liaise with CSC in preparing updated IEE and/or SEMP

#	Millstones/Actions Specialist Consultant (Environmental		Construction Supervision Consultant (Environmental Specialist)	IPMO (Environmental Specialist)	Department of Permits, Environmental Protection and Social Affairs (Environmental Specialist)
4	Reporting	Prepare monthly environmental monitoring reports and send it to CSC and IPMO	Prepare inputs to environmental part of quarterly construction progress reports;     Prepare inputs to semi-annual environmental monitoring report (SAEMR) to be submitted to IPMO for further review, comments and improvement.     Conduct Post-Construction Final Environmental Audit and prepare final environmental audit report.	1. Finalize SAEMRs (and Final EMRs upon project completion), send it to ADB and address potential ADB's comments until SAEMR disclosure;  2. Provide ENG and GEO final versions of SAEMRs to be uploaded on UWSCG website.	Upload the approved reports (ENG and GEO) provided by IPMO to UWSCG website for Public Disclosure
5	Permits and clearances	NA	NA	NA	Obtaining environmental permits and clearances
6	Non-compliances	Prepare a corrective action plan (CAP)	Assist contractor in preparing the CAP.	Review and approve the CAP and provide to ADB for review and comments if any.	
7	Public consultations	Participate in public consultations during project implementation	Organize public consultations: inform people about activities and prepare the record of consultations.	Participate in public consultations during project implementation	UWSCG & IPMO host PCs, CSC will present the topics related to environmental issues

#	Millstones/Actions	Contractor (Environmental Specialist)	Construction Supervision Consultant (Environmental Specialist)	IPMO (Environmental Specialist)	Department of Permits, Environmental Protection and Social Affairs (Environmental Specialist)
8	Grievance Redress Mechanism	Project site Focal person to record environmental grievances in the logbook and follow up with UWSCG established practice for grievance redress	1. Ensure that grievances, if any, are being properly documented and addressed timely and effectively.  2. Assist IPMO to develop consolidated GRM database and consolidation of GRM cases both for ENV and Social safeguards	In case of need assist IPMO Social/Resettlement Consultant in resolving process of environmental safeguards related complaints; Assist IPMO Social/Resettlement Consultant in GRM database consolidation and data analysis.	UWSCG maintains GRM applicable to all projects. UWSCG will ensure IPMO information on grievances is consolidated into the UWSCG grievances (both environmental and social) without duplication.
9	Trainings	Attend on-site trainings organized by IPMO and ADB/RETA Consultant	Assist the IPMO in organization of trainings for the Contractors on environmental safeguards requirements.	Organize trainings for the Contractors in coordination with ADB/RETA consultant. Participate in external trainings in environmental management and environmental auditing	Participate in external trainings in environmental management and environmental auditing

**35.** A list of main organizations involved in the USIIP/T3 and relating to environmental safeguards is presented in Table 3 below.

Table 3: List of Main Organizations under USIIP/T3

Type of project	Name of Agency/Company	Environmental Staff	Name and contact details
participant			
Lender	Asian Development	Country	Ninette R. Pajarillaga
	Bank	Environmental Focal	E-mail: <u>npajarillaga@adb.org</u>
		Safeguards	Nino Nadashvili
		Officer Georgia Resident	+995 577 44 09 90
		Mission Asian Development Bank	nnadashvili@adb.org
		ADB RETA	George Kobaladze
		Environmental Consultant	+995 599 689834
		Consultant	gkobaladze.consultant@adb.org
Borrower	UWSCG	UWSCG, Department of	Ms. Maka Goderdzishvili
		Permits, Environmental	Tel: +995 599 229925
		Protection and Social Affairs, Head	E-mail:
			m.goderdzishvili@water.gov.ge
		UWSCG/IPMO Department of Management of	Mr. Davit Akhvlediani Tel: +995 599 348090
		Projects Financed by Donor Organizations, Acting Head	E-mail: d.akhvlediani@water.gov.ge
Borrower	UWSCG/USIIP/T3	Environmental	Ms. Ketevan Chomakhidze
		Specialist	Tel:
			+995 577 380309

Type of project participant	Name of Agency/Company	Environmental Staff	Name and contact details
			E-mail:  Chomakhidzek@yahoo.com
Supervision Consultant	A Consortium of Consulting Firm led by Eptisa Servicios de Ingeniria S.L. (Spain) in association with SAFEGE (Belgium) and JSC Georgian Water Project (Georgia)	Environmental Specialist:	Mr. Irakli Legashvili Tel: +995 577 177016 E-mail: chem_ira@yahoo.com
Contractor URE-02	. JV of Ludwig Pfeiffer Hoch-und Tiefbau GmbH and Co.KG ProtechnoSrl (Germany) / Aritim (Turkey)	Environmental H&S Specialist	Mr.Nikoloz Meparidze Tel: +995 599 346821 E-mail: niko@telenet.ge
Contractor URE-01	. JV of Peri Ltd (Georgia) Leading Partner and Slon LLC (Azerbaijan)	Environmental H&S Specialist	Mr. Levan Asabashvili Tel: +995 599 962 693 Email: levani.asabashvili@mail.ru
Contractor KUT-01	. SMK Ulusal Insaat Ve Ticaret A.S. (Turkey)	Environmental Specialist	Ms. Natia Babukhadia E-mail: natiiibab@gmail.com Tel: +995 595 150444
		H&S Specialist	Mr. Beso Balanchivadze E-mail: besobal84@gmail.com Tel: +574 188 653

Type of project participant	Name of Agency/Company	Environmental Staff	Name and contact details
Contractor ABA-01	. AS Inshaat–N, LLC (Azerbaijan)	Environmental H&S Specialist	Mr. Nodar Usupishvili E-mail n.usupashvili@gmail.com Tel: +995 577 68 16 71
Contractor GUD-03	. "China Nuclear Industry 23 Construction Co." LTD (CNI23)	Environmental H&S Specialist	Mr. Aleksandre (Sasha) Mchedlishvili E-mail  alexandermchedlishvili1@gmail.com Tel: +995 574 02 77 33

# 2.3 Project Activities during Current Reporting Period

**36.** During the reporting period, construction work was carried out only under sub-project GUD-03 and therefore information only about this sub-project is reflected in this SAEMR. All civil works under other USIIP/T3 sub-projects have already been completed. For more detailed information, please see para 7-19 above.

# 2.3.1 Project Activities during the Reporting Period

37. Construction progress under GUD-03 sub-project is presented in the Table 4 below.

Table 4: Progress of Construction Works, January-June 2024, GUD-03

GUD-03	Total	Progress during the reporting period (July- December 2023)	Progress during the reporting period (January-June 2024)
Plant and Mandatory Spare Parts Supplied from Abroad	21.70%	55.00%	70.00%
Design	5.06%	98.00%	98.00%
Installation and other Services	73.25%	85.00%	87.00%
Totals:	100.00%	79.00%	86.00%

# 2.4 Description of Any Changes to Project Design

**38.** In December 2023, Change Order No. 1 was sent to ADB with a proposal to make changes in the GUD-03 sub-project, to exclude WWTP No. 5 from the sub-project. additional information about the mentioned case is presented in Annex D below.

# 2.5 Description of Any Changes to Agreed Construction methods

**39.** During the reporting period Juanury-June 2024 there were no changes to agreed construction methods under the GUD-03 sub-project.

# 3. ENVIRONMENTAL SAFEGUARD ACTIVITIES

# 3.1 General Description of Environmental Safeguard Activities

- **40.** During the reporting period, a total of two site visits were conducted under USIIP/T3 due to the fact that all Civil Works has already been completed under the above tranche, with the exception of sub-project GUD-03, where due to weather conditions, construction work only started in May 2024.
- 41. One site visits was carried out under the ABA-01 sub-projects on May 30 2024 and one site visit was conducted on June 4, 2024 under the GUD-03 sub-project. During the reporting period ADB's Environmental Safeguard Mission also visited construction sites on May 30 2024 (Abasha) and June 4 2024 (Gudauri). Description of the status of monitoring visits, including dates of site visits, photographs, persons involved in the site visit, inconsistencies identified during the site visits are shown in Table 4 below. A total of 5 Non-compliances were identified during two site visits under aforementioned sub-projects and one Non-compliance Notice was issued to the construction company by ESs of UWSCG/USIIP.
- **42.** Environmental Monitoring Specialist of Eptisa, Mr.Irakli Legashvili conducted monthly monitoring of project sites under USIIP/T3 and developed Non-compliance Notices (please see Table 4 below).
- 43. USIIP Environmental Specialist Ms. Kate Chomakhidze monitored the construction work under the GUD-03 sub-project in accordance with IEE/EMPs and SEMPs requirements and other environmental commitments of the contractor. UWSCG/USIIP/ES developed Semi-Annual Environmental Monitoring Reports and submitted to ADB based on the quarterly reports prepared by SC and monitoring results.

#### 3.2 Site Inspections/Audits

**44.** As it was mentioned above the inspection and monitoring of construction sites under GUD-03 sub-project were conducted by ESs of USIIP and Eptisa. The schedule of Joint inspection carried out under GUD-03 sub-project is provided in the Table 5 below.

Table 5. Summary of Site Inspections/audits

Date of visit	Name of Contractor	Auditors name	Purpose of audit	Summary of any significant findings	Cross reference to Audit report	Implementation progress
Continuousl y during reporting period (January- June 2024)	"China Nuclear Industry 23 Construction Co." LTD (CNI23)	Mr. Aleksandre (Sasha) Mchedlishvili Environmental Specialist of contractor	Day to day monitoring of sites Compliance with Environmental and HES requirements	Environmental, Health and Safety issues on construction sites  Regular cleaning of the construction site  All photo-documentations are presented in Annex A and Annex B of this report.	Weekly Monitoring Checklists	Completed
30 May 2024	AS Inshaat– N, LLC (Azerbaijan) ABA-01 sub- project	ADB's Environmental Safeguard Mission, Nino Nadashvili, Safeguard Officer, OSFG, Asian Development Bank  Environmental monitoring specialists of SC/EPTISA	ADB's Project Complition Environmental Safeguard Mission	Hazardous and non-hazardous construction waste mixed with each other is uncontrollably dumped on the territory of the service center, Photo N1	Verbal instruction was given to contractor to immediately improve the situation.	Completed, mid of June 2024 Photo N1

Date of visit	Name of Contractor	Auditors name	Purpose of audit	Summary of any significant findings	Cross reference to Audit report	Implementation progress
		Mr.Irakli Legashvili Ms. Kate Chomakhidze UWSCG/USIIP /Environmental Specialist				
4 June 2024		ADB's Environmental Safeguard Mission, Nino Nadashvili, Safeguard Officer, OSFG, Asian Development Bank  Environmental monitoring specialists of SC/EPTISA Mr.Irakli Legashvili	ADB's  Project Complition Environmental Safeguard Mission	Safety norms during construction of sewerage Discharge Pipe are violated:  Workers without PPE	Verbal instruction was given to contractor to immediately improve the situation.  Non- Compliance Notice was issued and is presented in Annex B of this report.	Completed, June 2024, Photo N1

Date of visit	Name of Contractor	Auditors name	Purpose of audit	Summary of any significant findings	Cross reference to Audit report	Implementation progress
		Ms. Kate Chomakhidze UWSCG/USIIP /Environmental Specialist		There are no appropriate information signes on the construction site	(Photo- documentations are presented in Annex B, non- compliance note,)	Completed, June 2024
				There are no proper protective barriers on the sides of the trench, Photos N1 and N2	Corrective Action Plan has been developed by contractor and sent to SC and UWSCG	Not yet completed, Completed

Date of visit	Name of Contractor	Auditors name	Purpose of audit	Summary of any significant findings	Cross reference to Audit report	Implementation progress
				No tree felling permit is available on site,		
						Completed, June 2024, permits of tree cutting is available in contractor's CAMP

# 3.3 Issues Tracking (Based on Non-Conformance Notices)

- **45.** During the reporting period, January-June 2024, 5 non-compliances were identified by ESs of SC and USIIP compared to 52 non-compliances identified during the previouse reporting period July-December 2023. As a result, during the period from January-June 2024, the contractor eliminated 75% of these discrepancies compared to 96% of these discrepancies in July-December 2023.
- **46.** The contractors were always informed on the detected non-conformances and were demanded to improve on the deadline set and send photos of improvements made together with the corrective action plans. Environmental team of EPTISA and UWSCG/USIIP monitored the improvements during the next monitoring visits. All Non-conformance Notices issued during the reporting period is presented in ANNEX B to this Semi-Annual EMR.
- **47.** A summary of the identified environmental issues under GUD-03 sub-project for January-June 2024 is presented in the table below. There is only one open issues under GUD-03 sub-project during the reporting period.

**Table 6: Summary Table GUD-03** 

Total Number of Issues for Project	4
Issues Opened This Reporting Period	1
Issues Closed This Reporting Period	3
Percentage Closed	75%

- **48.** As it is presented in para 44 and table 5 above, there is still one open issue under GUD-03 subproject, including safety norms during construction of sewerage Discharge Pipline to the Aragvi river (please see table 5 above, p.21-22 and NCN in Annex D below).
- **49.** A summary of the identified environmental issues under ABA-01 sub-project for January-June 2024 is presented in the table below. There are no open issues under ABA-01 sub-project during the reporting period.

**Table 7: Summary Table ABA-01** 

Total Number of Issues for Project	1
Issues Opened This Reporting Period	0
Issues Closed This Reporting Period	1
Percentage Closed	100%

#### 3.4 Trends

**50.** Information from the previous semi-annual EMR (July-December 2023) was used to identify trends in environmental protection issues. A summary of issues outstanding during the current reporting period is presented in paragraph 45 above. The percentage of issues still open under the GUD-03 sub-project during the reporting period is presented in table 5 above. As can be seen from Table 8 below, the total number of non-compliances under USIIp/T3 have been decresed from 52 to 5, the number of still open issues has increased from 2% to 12%.

Table 8: Summary of identified trends in environmental issues

Semi-Annual EMR No	Total No of Issues	% issues Closed	% issues closed late
July-December 2023	52	96%	2%
January-June 2024	5	88%	12%

**51.** All major Non-Conformances under USIIP/T3 during the reporting period are provided in an Annex B of this report.

# 3.5 Unanticipated Environmental Impacts or Risks

**52.** There were no Unanticipated Envrionemntal Impacts During the reporting period under USIIP/T3.

# 4. RESULTS OF ENVIRONMENTAL MONITORING

# 4.1. Overview of Monitoring Conducted during Current Period

- 53. During the reporting period Environmental Quality Measurements were not conducted under USIIP/T3 due to the fact that physical/construction activities during the reporting period were very limited, and all activities were carried out in a remote area from local residents.
- **54.** Noise and air pollution standards defined by IFC/WHO 1999, are presented in the Table 9 and 10 below.
- **55.** Gaorgian Standards for Noise, Vibration and Air Pollution is presented in the tables 11- 13 below.

**Table 9: Noise Level Guidelines** 

Noise	dB National Regulations		dB WHO	
Receptor	Daytime 07:00 - 22:00	Nighttime 22:00 - 07:00	Daytime 07:00- 22:00	Nighttime 22:00- 07:00
Residential; institutional; educational	55	45	55	45
Industrial; commercial	70	70	70	70

**56.** Air pollution standards by IFC/WHO 1999, are presented in the Table 8 below.

**Table 10: Air pollution Guidelines** 

Contaminants	IFC/WHO Guideline Value (Limit) mg/m³))
1	2
	(*IFC does not have a standard for "inorganic dust". Instead IFC applies standards for PM2.5 and PM10).
Inorganic dust	PM10 – 0,02/1 Year
molgamo daot	0,05/24 Hour
	PM2,5-0,01/1 Year
	0,025/24 Hour
Carbonic monoxide	n/a
Nitrogen dioxide (NO <sub>2</sub> )	0,2/ 1 Hour

Contaminants	IFC/WHO Guideline Value (Limit) mg/m³))
1	2
	0,04/1 Year
Aldehyde	n/a

**57.** Georgian Standards for noise level is presented in the table 9 below.

**Table 11: Georgian Standards for Noise Levels** 

Purpose/use of area and premises	Allowable limits (A-Weighted Decik (dBA))		
	L,	23:00 - 08:00	
	08:00 - 19:00, Day	Evening 19:00- 23:00	L <sub>night</sub> , Night
Educational facilities and library halls	35	35	35
Medical facilities/chambers of medical institutions	40	40	40
Living quarters and dormitories	35	30	30
Hospital chambers	35	30	30
Hotel/motel rooms	40	35	35
Trading halls and reception facilities	55	55	55
Restaurant, bar, cafe halls	50	50	50
Theatre/concert halls and sacred premises	30	30	30
Sport halls and pools	55	55	55
Small offices ( 100m³) – working rooms and premises without office equipment	40	40	40
Small offices ( 100m <sup>3</sup> ) – working rooms and premises without office equipment	40	40	40
Conference halls /meeting rooms	35	35	35
Areas bordering with houses residential, medical establishments, social service, and children's facilities (>6 story buildings)	55	50	45
The areas bordering with hotels, trade, service, sport, and public organizations	60	55	50

Note: in case noise generated by indoor or outdoor sources is impulse or tonal, the limit must be 5dBA less thanindicated in the Table.

**58.** Table 12 shows the threshold values of the major air pollutants as defined by the GEO, IFC and EU legislation.

**Table 12: Ambient Air Quality Standards** 

		Limit (µg/m³)			
Parameter	Averaging Period	Maximum Per- missible Concen- tration (MPC) in Georgia	IFC Guideline Value	EU Ambient Air Quality Guide- lines	
	30 minutes	200	-	-	
Nitrogen Dioxide	1 Hour	-	200	200	
$(NO_2)$	24 Hours	40	-	-	
	1 Year	-	40	40	
	10 minutes	-	500	-	

		Limit (µg/m³)			
Parameter	Averaging Period	Maximum Per- missible Concen- tration (MPC) in Georgia	IFC Guideline Value	EU Ambient Air Quality Guide- lines	
	30 minutes	500	-	-	
Sulphur Dioxide	1 Hour	-	-	350	
$(SO_2)$	24 Hours	50	20	125	
Carbon Monoxide	30 minutes	5,000	-	-	
(CO)	24 Hours	3,000	-	-	
Total Suspended Par-	24 Hours	150	-	-	
ticulates (TSP) / Dust	30 minutes	500	-	-	
DM10	1 year	40	20	40	
PM10	24 hours	50	50	50	
DM2 E	1 year	25	10	25	
PM2.5	24 hours		25	-	
Ozone	8-hour daily max.	120	100	120	

**59.** The Georgian Standards for vibration are designed for human comfort. These are shown in 13. Note that no standards for building damage exist.

**Table 13: Georgian vibration values** 

Table 13. Georgian vibration values				
Average Geometric Frequencies of Octave Zones (Hz)	Allowable Values X0, Y0, Z0			
	Vibro-acceleration		Vibro-speed	
	m/sec <sup>2</sup>	Hz	m/sec 10 <sup>-4</sup>	Hz
2	4.0	72	3.2	76
4	4.5	73	1.8	71
8	5.6	75	1.1	67
16	11.0	81	1.1	67
31.5	22.0	87	1.1	67
63	45.0	93	1.1	67

Note: It is allowable to exceed vibration normative values during daytime by 5 dB during daytime. In this table of incon-stant vibrations, a correction for the allowable level values is 10dB, while the absolute values are multiplied by 0.32. The allowable levels of vibration for hospitals and rest houses have to be reduced by 3dB.

#### 4.2 Trends

62. During the reporting period, Environmental Instrumental Measurements for noise, dust, and air pollution were not conducted under the USIIP/T3. This was due to the completion of all construction activities, except for the GUD-03 sub-project. As for GUD-03 all sensitive receptors situated at a considerable distance from the construction site. Furthermore, all operations were confined within buildings/WWTPs and a remote area away from local residents.

# 4.3 Summary of Monitoring Outcomes

**63.** Due to weather conditions in Gudauri, construction work was carried out only for a limited period of end of May and June 2024, therefore no environmental quality measurements were carried out under GUD-03 sub-project.

#### 4.4 Material Resources Utilisation

#### 4.4.1 Current Period

#### **GUD-03**

**64.** The contractor had provide information on the material resources utilization under the GUD-03 sub-project. The amount of the electricity and water used by the CC/"China Nuclear Industry 23 construction co." during the reporting period under GUD-03 sub-project is provided in the table below.

Table 14: Material Resources Utilization under GUD-03 Sub-project, January-June 2024

N	Utilized Resources	Monthly	Measurement
1	Consumption of Water	10	M3
2	Electricity	300	kwt
3	Fuel	250	L

#### 4.4.2 Cumulative Resource Utilisation

**65.** Commulative resources utilization of electricity, water and fuel for whole project life is presented in the Table below.

Table 15: Cumulative Resources Utilization under GUD-03 Sub-project

N	Utilized Resources	Monthly	Measurement	
	July-December 2021			
1	Consumption of Water	60	M3	
2	Electricity	22587	kwt	
3	Fuel	800	L	
	January-June 2022			
1	Consumption of Water	70	M3	
2	Electricity	23539	kwt	
3	Fuel	3917	L	
	January-June 2022			
1	Consumption of Water	62	M3	
2	Electricity	20501	kwt	
3	Fuel	1500	L	
	July-December 2023			
1	Consumption of Water	16	M3	
2	Electricity	600	kwt	
3	Fuel	500	L	
	January-J	une 2024		
1	Consumption of Water	10	M3	

N	Utilized Resources	Monthly	Measurement
2	Electricity	300	kwt
3	Fuel	250	L
	Total (July 2021 – June 2024)		
1			
1	Consumption of Water	256	M3
2	F1	00707	
	Electricity	83727	kwt
3			
	Fuel	7967	L

# 4.5 Waste Management (GUD-03)

#### 4.5.1 Current Period

- 66. At the construction sites under GUD-03 sub-project, there are mainly produced household, construction (inert, surplus soil) and hazardous waste. Mainly household waste is collected in municipal containers which are served by the local cleaning service. Contractors always have separate containers for household and hazardous waste with proper labeling at the construction site.
- 67. The construction waste that is allocated at the construction site is removed for its disposal that is managed by formal agreement with local municipality. All relevant agreement are provided in ANNEX C to this report. According to the Annex C to this report agreements with the "Solid Waste Management Company" was signed in 1 January 2023 until the 31 December 2023. The new contract will be updated and submitted with Solid Waste Company in the next reporting period and attached to the SAEMR of July-december 2024.

Table 16: Amount of Waste Generated under GUD-03 Sub-project, January-June 2024

N	Waste management		Measurement
3	Municipal Waste	9	$M^3$

#### **GUD 03**

- **68.** Household waste is collected at the construction sites in the Household Waste containers and transmitted to Municipal waste containers and finally disposed at the Kazbegi landfill.
- **69.** Construction/demolition waste are also disposed according to the agreement with Solid Waste Management Company at the Kazbegi landfill, please see relevant agreement in ANNEX C to this report.
- 70. Hazardous waste is collected at the construction territories in the Hazardous Waste containers and according agreement transmitted to Medical Technology Company for final disposal. HSE specialists of the construction companies is responsible for the waste management under GUD-03 sub-project.

#### 4.5.2 Cumulative Waste Generation

71. During the construction activities mostly waste is producing in result of maintenance of construction equipment, functioning of camp and excavation works. As it was mentioned in para 61 above household waste is collected at the construction sites in the Household Waste containers and transmitted to Municipal waste containers and finally disposed at the Kazbegi landfill, for disposal of hazardous waste the Contractor has signed agreement with "Solid Waste Management Company" Were possible the Contractor use excavated material for filling of embankment.

#### 4.6 Health and Safety

#### 4.6.1 Community Health and Safety

**72.** No community incidents have been reported under GUD-03 sub-project during the reporting period.

#### 4.6.2 Worker Safety and Health

#### GUD-03

- **73.** Environmental H&S Manager of GUD-03 sub-project Mr. Aleksandre (Sasha) Mchedlishvili Performed every day monitoring, induction and supervision of ongoing works according to HSE standards and by requirements of ADB/UWSCG/EPTISA and kept H&S incidents/accidents/Near Misses log book.
- **74.** Health & safety and environment issues which were covered during the reporting period are as follows:
  - Working on deep and open trenches of sewerage discharge pipe from WWTP N4 to Aragvi River
- **75.** The main non-compliances idetified during the reporting period included workers Safety regulations during construction work, in particular safe walkways on open reservoirs inside the buildings/WWTPs to avoid workers falling and being injured in open trenches.work at height without protective equipment.
- **76.** One Non-compliance Notice have been issued by SC/Eptisa and contractor improved the situation within the propose deadline. All near missis were improved by the contractor during the reporting period and no further actions are required.

#### 4.7 Training

77. No training sessions were conducted during the reporting period.

#### 5. FUNCTIONING OF THE SEMP

#### 5.1. SEMP Review

**78.** The following SSEMPs were prepared by contractor, within the framework of URE-01, URE-02, KUT-01, ABA-01 and GUD-03 projects during the previous reporting periods:

#### **GUD-03**

 Location Specific EMP for Construction of Gudauri WWTPs (September 2019). LSEMP was updated in June 2024 due to the exclusion of WWTP N5 from GUD-03 sub-project.

#### **URE-01:**

- SSEMPs for Ureki Well Fields (May 2016)
- Reservoir#1 (November 2016)
- Water Supply Pumping Station (November 2016)
- Reservoir #2 (Laituri Reservoir) (August 2018);

#### **URE-02:**

- SSEMP for Ureki Waste Water Treatment Plant (November 2015)

#### KUT-01

- SSEMP for Godogani Reservoir (August 2016)
- SSEMP Mukhnari Reservoirs (March 2016)
- SSEMP Aqueduct River Crossing (December 2019)
- SSEMP Partskanakanebi Chlorine Station (January 2020)

#### **ABA-01**

- SSEMP for Abasha Service Center (February 2020)
- **79.** All SSEMPs under GUD-03, KUT-01, URE-01, URE-02 and ABA-01 projects were prepared by Contractor, endorsed by SC and approved by UWSCG and reviewed/commented by the RETA International Environmental Consultant of ADB under RETA 8663.

#### 6. GOOD PRACTICE AND OPPORTUNITY FOR IMPROVEMENT

#### 5.2. Good Practice

**80.** During the reporting period there were close interactions between IPMO, consultant supervision team and contractors to improve the tracking of actions to address non-conformances under GUD-03 and ABA-01 sub-projects. As a result Construction waste materials and Hazardous Waste container were installed at the proper organized place with concrete floor and roofing.

# **6.2. Opportunities for Improvement**

**81.** During the reporting period, IPMO improved tracking of corrective actions. Close monitoring, guidance and communication between PIU, SC and CC has been improved to avoid inconsistencies and improve the current situation. Further opportunities for improvement will include reinstatement of the fuel spill areas in construction CAMP and to be properly reinstated including cover with a layer of gravel and improve workers safety regulations during construction work, in particular, immediately after the resumption of construction work, it is necessary to create safe walkways on open reservoirs inside the buildings/WWTP in order to avoid falling of workers and injury in open trenches.

# 6. SUMMARY AND RECOMMENDATIONS

# 7.1 Summary

- **82.** During the reporting period, January-June 2024, a total 2 site visits were carried out by ADB Safeguard Mission and Environemntal Specialists of SC and UWSCG/USIIP under GUD-03 and ABA-01 sub-projects and 5 non-compliances were revealed compeared to 52 non-compliances identified in previouse reporting period July-December 2023. It should be noted also that contractor eliminated 88% of these discrepancies.
- **83.** The monitoring activities included monitoring of compliance of construction activities to the IEE/EMP and SEMP requirements under USIIP GUD-03 sub-project.
- **84.** Two Non-Conformance Notices have been issued to the contractor by the environmental specialist of SC and USIIP under GUD-03 sub-project. Corrective Action Plans have been implemented by CC in order to reduce environmental impacts of the project.

#### 7.2 Recommendations

- **85.** During the reporting period, January-June 2024, the T3 of Investment Program was implemented in accordance with the requirements of ADB SPS 2009 and the National Legislation.
- **86.** Post Construction Audit Report will be prepared under the GUD-03 sub-project in November 2024, by the Supervision Consultant and approved by UWSCG/USIIP Environemntal Specialist.
- **87.** More detailed recommendations/next steps for the implementation of T3 during the next reporting period January-June 2024 are provided in the Table 17 below:

Table 17: Recommendations to Address Environmental Issues under GUD-03 Sub-project during the January-June 2024

Recommendations GUD-03 sub-project		
GUD-03		
(ii) workers Safety regulations during construction work, in particular safe walkways on open tranches on the discharge pipline to the Aragvi River	Instruction are given to contractor to improve the situation and to conduct following mitigation measures by the end July-2024, the Health and Safety training is planned by the end of July 2024, under GUD-03 sub-project.	

# **ANNEXES**

ANNEX A: PROJECT PHOTOS
PROJECT PHOTOS GUD-03

# **Construction of Gudauri Waste Water Treatment Plant N3**







# **Construction of Gudauri Waste Water Treatment Plant N1**









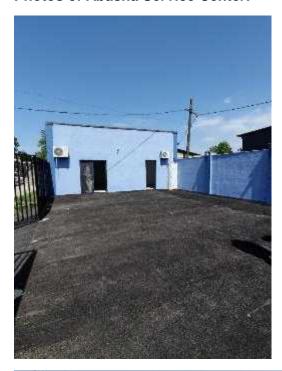
**Construction of Gudauri Waste Water Treatment Plant N4** 







# **Photos of Abasha Service Center:**





# **ANNEX B: NON-CONFORMANCE NOTICE, 4 JUNE 2024**

Urban Services Improvement Investment Project - Georgia

Date: 04/06/2024

Page 1 of 3

## Non-Compliance Notice

Project: Urban Services Improvement Investment Program, Georgia	Non-compliance Notice	
Contract No: UWSCG-ICB-GUD-03		
Contractor: China Nuclear Industry 23 Construction Co., Ltd	Gudauri	
Reference: Construction of Wastewater Treatment Plants in Gudauri		

This notice is to advice you, the prime Contractor, on the referenced Contract, of the following notice on environmental measures to be implemented urgently.

#### Discharge pipe, Aragvi River WWTP 4

Safety norms during construction of Discharge Pipe are violated.

Construction Area is not fenced by temporary fence, there is no appropriate information banner, there are no protective barriers on the sides of the trench

No tree felling permit is available on site

#### Photos of WWTPs



Urban Services Improvement Investment Project - Georgia

Date: 04/06/202

Page 2 of

All these conditions have to be remedied immediately by the prime Contractor (China Nuclear Industry 23 Construction Co., Ltd)

# Date of site visits 04.06.2024

Ketevan Chomakhidze UWSCG/USIIP Environmental Specialist

# ANNEX C: DISPOSAL OF WASTE UNDER GUD-03 SUB-PROJECT

DISPOSAL OF CONSTRUCTION WASTE, AGREEMENT BETWEEN THE GEORGIAN SOLID WASTE MANAGEMENT COMPANY AND CONTRACTOR - LTD "CHINA NUCLEAR 23 CONSTRUCTION CO."



# HAZARDOUSE WASTE DISPOSAL SERVICE AGREEMENT BETWEEN THE LTD "SOLID WASTE MANAGEMENT COMPANY" AND MEDICAL TECHNOLOGY.



# ANNEX D: CANCELATION OF THE WWTP N5 FROM GUD-03 SUB-PROJECT

On December 24, 2019 one complaint was registered as part of the GUD-03 subproject in the Complaints log at the Contractor's camp office (Please see Table below) by Lida Seturidze, who complained about the location of WWTP No. 5 and mentioned that construction is planned on the land of her ancestors where there are also 90-year-old pear trees.

On December 27, 2019 public consultation meeting was held with local population, regarding social issues of GUD-03 sub-project (Construction of WWTPs in Gudauri). The main purpose of the Consultation Meeting was, to provide Local Population with the information about GRM, uder the GUD-03 sub-project, it's importance and planned works, to raise their awareness of project activities, safety and sanitation measures as well as educate local population on the importance of sanitation system. After Presentation Lida Seturidze had opportunity to discuss her issue with all the parts of project. After meeting Lida Seturidze got recommendation to register complaint in UWSCG GRM system (please see the filled Compliants Log with Lida Seturidze's case below).

**Table: COMPLAINTS LOG** 

Number /ნომერ ი	Date/Locatio n თარიღი/მ დებარეო ბა	Complainant/ Date of Contact მოსაჩივრე/საკ ონტაქტო დეტალები	Details of Complaint საჩივრების შინაარსი	Investigation/Miti gation Action პრობლემების შესწავლა/შემარბი ლებელი ღონისპიებები	Resolution Status პრობლემის გადაწყვეტის სტატუსი
#1	24.9.2019 village Seturabi WWTP #5 Land #71.62.56.081	Ms. Lida (Giuli) Seturidze +995 579112101 Tedo burduli +995 595102172	The Complainants stated that the land registered by UWSCG for WWTP #5 belongs to them from her ancestors	Under negotiation by UWSCG	Grievance Redress Committee Meeting was held on 20.02.2020 and Grievance Redress Commission Meeting was held on 31.07.2020. Since no agreement could be reached with the applicant, the Commission made a decision to remove part of works envisaged for the Seturebi (Zone 5). UWSCG has submitted change order N1 to cancel construction of WWTP 5 (26 <sup>th</sup> of December 2023)

Grievance Redress Committee and The Commission meetings were held in order to discuss Lida Seturidzes Complaint. Grievance Redress Commission has decided that it is impossible to relocate the wastewater treatment plant as it was requested by complainant, owing to tight

deadlines of Gudauri Wastewater Treatment Plants Construction Project (ADB/GUD-03), and, as it is necessary to conduct different types of pre-design surveys and follow different procedures to obtain permits per the effective legislation of Georgia to relocate the plant, and as there is no legal basis to meet the cash compensation demand of the claimant, and to prevent any abuse of the claimant, the Commission made a decision to remove part of works envisaged for the Seturebi (Zone 5) out of the GUD-03 sub-project/ construction of Wastewater Treatment Plants in Gudauri.

UWSCG has submitted change order N1 to cancel construction of WWTP 5. No works has been commenced on location of WWTP 5. As a result, no construction activities have begun at the planned site for WWTP 5, leaving the land in its original, undisturbed state. The photos of WWTPN5 is provided in the Fog.1 below.

Figure 1. Photos of WWTP 5 Location



# ANNEX E: POST CONSTRUCTION AUDIT REPORT OF ABA-01 SUB-PROJECT

# Post Construction Environmental Audit Report



GEORGIA: L2807: URBAN SERVICES IMPROVEMENT INVESTMENT PROGRAM (TRANCHE 3)

Sub-Project: Construction of Abasha Water Supply System (ABA-01)

> First Draft Prepared in April, 2024 Updated in June 2024

# **ABBREVIATIONS**

ABA-01	-	Construction of New Transmission Pipeline in Abasha
ADB	-	Asian Development Bank
CAP	-	Compensation Action Plan
DC	2	Design Consultant
DEPRP	-	Department of Environmental Protection, Resettlement and Construction Permit of UWSCG
EA	-	Executing Agency
EHS	-	Environmental Health & Safety
EIA	-	Environmental Impact Assessment
EIP	-	Environmental Impact Permit
EMP/ SSEMP	1	Environmental Management Plan/ Site-Specific Environmental Management Plan
ES	-	Environmental Specialist
GoG	-	Government of Georgia
GRC	-	Grievance Redress Committee
GRM	-	Grievance Redress Mechanism
IA	-	Implementing Agency
USIIP	-	Urban Sector Improvement Investment Program
IEE	-	Initial Environmental Examination
MoEPA	-	Ministry of Environment Protection and Agriculture of Georgia
MoRDI	-	Ministry of Regional Development & Infrastructure
UWSCG	-	United Water Supply Company of Georgia
WS	-	Water Supply

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#### I. INTRODUCTION

- This report represents the Post Construction Environmental Audit Report for Construction of Abasha Water Supply System (ABA-01). Subproject under L 2807: Urban Services Improvement Investment Program" (USIIP), Tranche 3. The initial draft of this report was prepared by Supervision Consultant "Eptisa" in April 2024 and further updated in June 2024.
- This Post Construction Audit Report is being prepared to comply with the 2009 ADB's SPS and Georgian legislation, including safeguards requirement and aims to identify past and present concerns from the production and business activities of Project Company that related to impacts on environment. The specific objectives of the audit can be summarized as follows:
  - Determine and verify whether all environmental requirements, criteria and constraints, prescribed in IEE, SSEMP and the Concessionaire's Environmental Policy have been adhered to during the construction phase.
  - Determine and verify whether the mitigation actions and rehabilitation requirements contained in the SSEMP have been appropriate and successful to prevent or control environmental pollution and/or damage.
  - Ensure that an appropriate environmental monitoring and control program exits to follow up on mitigation and rehabilitation works completed during the construction phase.
  - Ensure that appropriate environmental monitoring and control program exists for monitoring of all environmental aspects during the operational phase.
  - To identify any shortcomings in the SSEMP and EMS system implemented during the construction phase and to recommend alterations to the EMS applicable to the operational phase.

## II. PROJECT DESCRIPTION

- 3. The Urban Services Improvement Investment Program was developed as the Government's response to the lack of adequate and/or safe water supply, sewerage and sanitation in urban areas of Georgia. This is intended to optimize social and economic development in selected urban areas through improved urban water and sanitation services, and is financed by the ADB through its Multi-tranche Financing Facility. The Ministry of Regional Development and Infrastructure is the Executing Agency and the "United Water Supply Company of Georgia", LLC is the Implementing Agency of the Investment Program. UWSCG is a 100% state-owned company.
- 4. The Investment Program improves infrastructure through the development, design and implementation of a series of subprojects, each providing improvements in a particular sector (water supply and/or sanitation) in one town. Sub-projects rehabilitate existing infrastructure and/or create new and expanded infrastructure to meet the present and future demand. Water supply improvements include source augmentation and head works, pumping systems, treatment facilities, transmission and distribution network; and, sewerage improvement works include sewer network, pumping stations, main collectors and waste water treatment plants.
- 5. Tranche 3 of the Investment Program includes:
  - Construction of Water Supply and Wastewater Network in Ureki/Phase 3 (URE-01);
  - Construction of Wastewater Treatment Plant in Ureki (URE-02);

- Construction of Abasha Water Supply System (ABA-01);
- Construction of Waste Water Treatment Plants in Gudauri (GUD-03).

#### 2.1 Brief subproject description

- 6. The implementation of the present project, ABA-01 "Construction of Abasha Water Supply Systems" was necessary with the aim to improve water supply system in Abasha for the population of the city, the proposed project originally envisaged within the Aba-01 project the following major works will be carried out: approximately 15 km long 500 mm diameter transmission pipeline will be installed from headworks to the town of Abasha, chlorination building will be constructed and the water meter will be installed at the headwork. Installation of SCADA system data from water flow meter chamber to Chlorination Room.
- Construction of UWSCG's Service Center was added to the actions to be implemented within
  the project in 2019. This was completely new item within the VO-03 due to a new Design
  demanded by the Employer. The civil work includes demolition works, earthworks, concrete
  works, masonry walls, roof wood construction, finishes, mechanical and electrical
  installations.
- Repairing of Well Nº11 Building. Works for Rehabilitation of well #11 within the VO-03
  include civil works of the existing Building; new Roof, Metal works (platform, crane, Handrail),
  Electrical installation and ventilation, new concreting of the bottom chamber, installation of
  valves, fittings, finishes. Connection of OD500 to the well #11.
- Repairing of Well №1 to №10. Civil works for Reconstruction of well head for well 9 and 10
  and replacing existing R/C roof for wells N.1 to N. 8 including DI 600 Cover and air exchange
  hox.
- 10. Rehabilitation of Well access road. Civil works for access road to the wells within the VO03.
- 11. Fence for Well Field. Change in quantity covered by VO-03 for barbed wire for fence type 2 (from 4 layers to 8 layers as demanded by the Employer) and adjustment in quantities for poles, RC foundation and wire mesh for fence type 1.
- 12. The contract for implementation of ABA-01 was signed on October 13, 2017 with AS Inshaat–N, LLC (Azerbaijan). The original project completion date for the project was March 14 2020. The project completion date then was extended until the June 18 2022. Currently, ABA-01 project completion day has expired and the sub-project is in delay damages period until the end of December 2023.
- 13. On February 15, 2024, an agreement was signed between the project consultant company Eptiza Servicos de Ingenier S.L. Branch Georgia and "Eco-Spectri" Ltd, according to which the latter had to conduct the Post-construction Environmental Audit of the said subproject and had to present the relevant report.

## 2.2 Agencies Involved in ABA-01 subproject implementation under USIIP, Tranche 3

14. The main institutions that are involved in implementation of the EMP are The Ministry of Regional Development and Infrastructure is the Executing Agency and the "United Water Supply Company of Georgia", LLC is the Implementing Agency of the Investment Program, Supervision Consultant (SC) the Contractor and to a lesser extent the Ministry of Environment Protection and Agriculture (MoEPA).

- 15. The Investment Program Management Office (IPMO) under UWSCG which was created in January 2011 and which is the Donors Funded Projects Management Department, is responsible for the day-to-day management of the project, including the implementation of the EMP. IPMO has an Environmental Specialist, Ms. Kate Chomakhidze who is responsible for managing the environmental aspects of the USIIP. From February 2024, IPMO has a new Acting Head of Department, Mr. Davit Akhvlediani.
- 16. The SC include a full time Environmental Specialist, Mr.Irakli Legashvili to assist the IPMO oversee day-to-day implementation of EMPs by contractors, including compliance with all government rules and regulations; Support IPMO in the review and endorsement of contractor's SSEMP; Conduct inspections on contractor's implementation of SSEMP and compliance with government rules and regulations; Ensure contractors comply with health and safety requirements per approved SSEMP's Health and Safety Management Plan; Conduct investigations on grievances/complaints, incidents and accidents; Assist IPMO in addressing any grievances in a timely manner as per the GRM; Monitor corrective actions as required in CAPs, and ensure non-compliances are resolved immediately and are not occurring repeatedly; Prepare recommendations for contractors repeated non-compliances on safeguards and EHS requirements; Submit monthly and quarterly environmental monitoring reports to IPMO.
- 17. The Supervition Contractor also appoints a full time Environmental specialist under ABA-01 sub-project Mr. Gela Ekizashvili to be a senior member of the construction management team based on site for the duration of the contract. Environmental Specialist of contractor is responsible for preparing the Specific Specific Environmental Management Plan (SSEMP) for endorsement by Supervision Consultant and approval by the UWSCG prior to the Contractor taking possession of the construction site; ensuring the SSEMP is implemented effectively throughout the construction period; environmental accidents/incidents including resolution activities; non-compliance notifications issued by the SC; Corrective action plans issued to the SC in response to non-compliance notices; Community relations activities including maintaining complaints register; Routine reporting of SSEMP compliance and community liaison activities; Implement Occupational Health and safety requirements. Implement site clean-up measures after civil works finalization.
- A list of main organizations involved in the USIIP/T3 and relating to environmental safeguards is presented in Table 1 below

Table 1: List of Main Organizations under USIIP/T3

Type of project participant	Name of Agency/Company	Environmental Staff	Name and contact details	
Lender	Asian Development Bank	Country Environmental Focal	Ninette R. Pajarillaga E-mail: npajarillaga@adb.org	
		Associate Safeguards	Nino Nadashvili +995 595 070442	

		Georgia Resident Mission Asian Development Bank	
		ADB RETA Environmental Consultant	George Kobaladze +995 599 689834 E-mail: gkobaladze,consultant@adb.org
Borrower	UWSCG	UWSCG, Department of Environmental Protection and Permits, Head	Ms. Maka Goderdzishvili Tel: +995 599 229925 E-mail: m.goderdzishvili@water.gov.ge
		UWSCG/IPMO Department of Projects Management, Acting Head	Ms. Davit Akhvlediani Tel: +995 598 179898 E-mail: d.akhvlediani@water.gov.ge
	UWSCG/USIIP/T3	Environmental Specialist	Ms. Ketevan Chomakhidze Tel: +995 577 380309 E-mail: Chomakhidzek@yahoo.com
Supervision Consultant	A Consortium of Consulting Firm led by Eptisa Servicios de Ingeniria S.L. (Spain) in association with SAFEGE (Belgium) and JSC Georgian Water Project (Georgia)	Environmental Specialist:	Mr. Irakli Legashvili Tel: +995 577 177016 E-mail: chem ira@yahoo.com
Contractor ABA-01	AS Inshaat–N, LLC (Azerbaijan)	Environmental H&S Specialist	Mr. Nodar Usupishvili E-mail: n.usupashvili@gmail.com Tel: +995 577 68 16 71

# III. Preparation and Implementation of the Audit Plan

- 19. As described in Section 2.1, under the ABA-01 subproject, the implementation of the Post-Construction Environmental Audit and the preparation of the relevant report was contracted to Eco-Spectri Ltd. (hereinafter "The Consultant").
- 20. To implement the above task, the company conducted a study of the existing documentation, based on which it developed audit questionnaires (checklists), identified the main approaches and together with environmental specialists involved in the project implementation, conducted the Post-Construction Environmental Audit.

#### 3.1 Study of available documentation

- 21. In order to prepare the environmental audit checklist and audit at the first stage, the consulting company conducted a study of environmental documentation prepared at different stages of the subproject development.
- 22. Project "Construction of Abasha Water Supply System" according to the requirements of the Asian Development Bank Safeguard Policy Statement, is categorized as project "B" from an environmental perspective and accordingly the Initial Environmental Assessment (IEE) document was prepared under the subproject. The final version of the document was approved in 2021. The document is available on the ADB webpage¹.
- 23. As required by the IEE document, the construction contractor was required to prepare a SSEMP document prior to commencement of works, which had to be approved by both UWSCG and ADB environmental specialists.
- 24. Permanent monitoring of the subproject by environmental specialists of the companies participating in the ABA-01 subproject implementation started in 2017. As indicated in July-December 2017 Bi-annual Environmental Monitoring Report<sup>2</sup>, no construction activities were carried out under the subproject during the given period. The information that construction activities were not implemented under the ABA-01 subproject is also stated in the January-June 2018 monitoring report<sup>3</sup>.
- 25. The first information on the results of the environmental audits conducted under the ABA-01 subproject is recorded in the July-December 2018 Bi-annual Environmental Monitoring<sup>4</sup> report. As mentioned in chapter 5.1 "SEMP Review", para. 89, "No Location Specific SEMP was prepared under ABA -01 project as the project includes only rehabilitation of existing water supply network".
- 26. As the project was amended in 2019 (see Chapter 2.1) and the Service Center Rehabilitation component was added to the activities to be implemented under the project, it became necessary to prepare SEMP. As indicated in July-December 2019 Bi-annual Environmental Monitoring<sup>5</sup> the construction contractor started preparing the document and the draft version of the document was ready in February 2020 (Bi-annual Report: July Dec 2019, chapter 4.1, para 87).
- 27. Finally, the SEMP for Abasha Service Center was prepared within the sub-project (as per the January-June Bi-annual Environmental Monitoring Report) was developed by the construction contractor, endorsed by SC and approved by UWSCG and reviewed/commented by the RETA International Environmental Consultant of ADB under RETA 8663.

https://www.adb.org/sites/default/files/project-documents/43405/43405-025-iee-en\_2.pdf

https://www.adb.org/sites/default/files/project-documents/43405/43405-025-emr-en\_10.pdf - (Para 34)

https://www.adb.org/sites/default/files/project-documents/43405/43405-025-emr-en\_0.pdf - Para 37

https://www.adb.org/sites/default/files/project-documents/43405/43405-025-emr-en\_1.pdf

Table 2: Statistics of non-compliances observed under the ABA-01 subproject in 2018-2023

		- //		2023	
Report period	Fixed non- compliances	Non-compliances corrected within the reporting period	Percentage ration of the corrected non- compliances	Remaining non- compliances	Source
Bi-annual Report (Jul -Dec 2018)	27	20	73%	7	https://www.adb.org/sites/default/files/project- documents/43405/43405-025-emr-en 1.pdf - chapter 3.3
Bi-annual Report (Jan - June 2019)	9	7	78%	2	https://www.adb.org/sites/default/files/project- documents/43405/43405-025-emr-en 2.pdf chapter 3.3
Bi-annual Report (July - Dec 2019)	5	4	80%	1	https://www.adb.org/sites/default/files/project- documents/43405/43405-025-emr-en 3.pdf capter 2.3
Bi-annual Report (Jan - June 2020)	9	6	67%	3	https://www.adb.org/sites/default/files/project- documents/43405/43405-025-emr-en 4.pdf chapter 3.4
Bi-annual Report (July - Dec 2020)	13	10	77%	3	https://www.adb.org/sites/default/files/project- documents/43405/43405-025-emr-en 5.pdf chapter 3.3
Bi-annual Report (Jan - June 2021)	2	2	100%	0	https://www.adb.org/sites/default/files/project- documents/43405/43405-025-emr-en 6.pdf chapter 3.3
Bi-annual Report (July - Dec 2021) Bi-annual Report	on ABA		final extension	day will be	Contractor issued the letter of claim for time extension agreed during the next reporting period and presented
(Jan - June 2022) Bi-annual Report (July - Dec 2022) Bi-annual Report (Jan - June 2023)	yet. The		day will be ag	reed duri	one 2022 that hasn't been approved by the UWSCG as ng the next reporting period and presented in the next
Bi-annual Report (July - Dec 2023)					ed until the June 18 2022. Currently, ABA-01 project is in delay damages period until the end of December
	0	0	N/A	0	https://www.adb.org/sites/default/files/project- documents/43405/43405-025-emr-en_12.pdf chapter 3.1 para 35.

29. As reported in the semi-annual reports, the mission of the Asian Development Bank is to conduct environmental monitoring of the mentioned sub-project every six months. According to the information taken from Bi-annual Report (July - Dec 2023) two site visits were carried out under the ABA-01 sub-projects, during the ADB's Environmental Safeguard Missions on 6 July 2023 and 14 December 2023. Due to the fact that there were no construction activities

- under the ABA-01 sub-project during the reporting period no major issues have been identified during the ADB's missions under ABA-01 subproject.
- 30. For the effective implementation of a GRM system under the USIIP, UWSCG issued special order (#122) on 30 April 2014, which was further replaced by Order # 196 (October 2018) on the "Establishment of GRM within the Framework of the Asian Development Bank Funded Projects" and signed by the head of UWSCG. Order #196 gives clear instructions to every involved stakeholder how to act when affected people are impacted by the project. On November, 2021 the amendment of the order #196 was developed by the order #431 (Please see Annex 2).
- 31. To promptly and effectively review and solve the complaint of the individual concerned, the Grievance Redress Commission (hereinafter the Commission) be established with the following composition:
  - Director of United Water Supply Company of Georgia, Chairperson of the Commission;
  - Deputy Director of United Water Supply Company of Georgia on Technical Issues, Member of the Commission;
  - Deputy Director of United Water Supply Company of Georgia on Financial Issues, Member of the Commission;
  - Deputy Director of United Water Supply Company of Georgia, Member of the Commission:
  - Deputy Director of United Water Supply Company of Georgia, Member of the Commission;
  - Deputy Director of United Water Supply Company of Georgia, Member of the Commission;
  - Deputy Director of United Water Supply Company of Georgia, Member of the Commission;
  - Head of Legal Department of United Water Supply Company of Georgia, Member of the Commission;
  - Head of Environmental Protection and Permits Department of United Water Supply Company of Georgia, Member of the Commission;
  - Head of Donor-Funded Projects Management Department of United Water Supply Company of Georgia, Member of the Commission;
  - Head of State-Funded Projects Management and Supervision Department of United Water Supply Company of Georgia, Member of the Commission;
  - Representative of Environmental Protection and Permits Department of United Water Supply Company of Georgia, the Commission Secretary".
- 32. According to information posted on the Asian Development Bank website under ABA 01 subproject, no written and/or verbal complaints were received during the project implementation phase.
- 33. Based on the information provided, the Consultant prepared the final environmental questionnaire of the project and agreed with the project implementing agency on the date of the final environmental audit.

#### 3.2 Post-Construction Environmental Audit

- 34. Within the framework of subproject ABA-01, the Post-Construction Environmental Audit was conducted on April 12 of the current year. From the Consultant's side I. Kaviladze and A. Revazishvili participated in the audit. The representative of Eptisa Servicios de Ingeniria S.L. Gela Ekizashvili, participated in the audit from the side of the project implementing agency.
- The Post-Construction Environmental Audit was conducted at three locations: (i) the Service Center; (ii) the central water supply area; and (iii) the location of the Wells.

#### 3.2.1 Service Center

- As amended in 2019, the rehabilitation component of the service center was added to the original project design.
- 37. The service center area is fully fenced (Figures 1 and 2) and visually finished; however, a non-compliance was observed during the inspection phase which should be corrected.
- 38. It also needs to be clarified who should develop and implement corrective actions based on the fact that according to the information obtained from the July-December 2023 Biannual Environmental Monitoring Report<sup>6</sup>: "ABA-01 project completion day has expired and the sub-project is in project liability period until the end of December 2023\* (para 17). Accordingly, at this point, the damage correction period has ended for the construction company and it is not responsible for developing and implementing corrective actions.

Figures 1 and 2: The service center area is fenced

- 39. Non-compliance 1: Hazardous and non-hazardous construction waste mixed together are uncontrollably placed on the territory of the service center (Figures 3 and 4). A hazardous waste container is also located within the service center area.
- 40. Requirement: "Waste Management Code" Chapter 19 (1) "It is prohibited to mix hazardous waste with other hazardous waste or other wastes, substances or materials".

https://www.adb.org/sites/default/files/project-documents/43405/43405-025-emr-en\_12.pdf

Besides, other requirement of the same law are violated, namely "Requirements for Hazardous Waste Temporary Storage Facilities".

Figure 3: Uncontrollably placed construction waste including hazardous waste

Figure 4: mixed wi



41. As Figure 5 shows, there is a hazardous waste container on the territory of the service center. In addition, Figure 6 also shows an empty hazardous materials container that is also located on the territory of the service center.

Figure 5: Hazardous waste container



#### 3.2.2 The site of the central water supply pipeline

- 42. The project considered both the laying of a 15 km central water pipe and the connecting of subscribers to the central water pipeline.
- After project completion, both the central pipeline buffer and water connection areas were fully restored by the construction contractor (Figures 7 and 8).



44. On the other hand, as seen in Figures 9-12, possible water leakage was observed in several locations along the newly installed pipeline. There is a possibility that the puddles of water shown in the Figures are caused by a damaged water pipe. However, without appropriate evidence, it is not possible to establish the said fact as non-compliance. On the other hand, the said fact cannot be ignored, because maybe not very high, but there is still a risk that the said puddles were caused by drinking water leaking from the central water pipe.





# 3.2.3 Well area

45. The well area is fenced and access by unauthorized persons and pets is restricted (Figures 13-14).



46. The area is guarded (Figure 15) and the guard room is equipped with an alternative power source (Figure 16).





47. The area is cleaned and there are no uncontrolled waste on it (Figure 17). Also, all well areas are protected from pollution (Figure 18).





 Non-compliance 2: Empty oxygen tanks are uncontrollably placed in the well area near the workshop (Figures 19 and 20).

Figures 19 and 20: Uncontrollably placed empty oxygen cylinders





49. Requirement: Management of empty containers for hazardous materials or their temporary placement should be done in compliance with the legislative requirements, as these containers belong to the class of hazardous waste.

# IV. CONCLUSIONS AND RECOMMENDATIONS

#### 4.1 Conclusions

- 50. On April 12, 2024, at the stage of the Post-Construction Environmental Audit within the scope of Project "Construction of New Transmission Pipeline in Abasha (ABA-01)" conducted by "Eco-Spectri" Ltd. 2 non-compliances and 1 observation were fixed, that require additional study.
- 51. The construction works have been fully implemented under the project and rehabilitation works have been satisfactorily carried out.
- 52. At the stage of the Post-Construction Environmental Audit, the deadlines for remediation of gaps for the construction contractor have expired. Therefore the responsibility for the identified non-compliances, as well as for the fulfillment of the requested additional studies lies with the project owner company.
- 53. See Table 3 for details on the observed non-compliances and observation.

Table 3: non-compliances and observation fixed during the Post-Construction Environmental Audit

	Environmental Audit				
#	Non-compliance/Observation	Required action and term	Responsible person	Note	
1	Non-compliance 1: Hazardous and non-hazardous construction waste mixed with each other is uncontrollably dumped on the territory of the service center, and there is a hazardous waste container as well.	separated from existing waste and handled accordingly.	UWSCG		

2	Non-compliance 2: Empty oxygen cylinders are placed unattended on the well site adjacent to the workshop.		UWSCG	
3	Observation 1: Puddles of water were observed at several locations near the central water main. Potable water may be leaking from the pipeline at this location.	Additional instrumental investigations should be conducted to determine the cause of the water puddles.  Term: 2 month	UWSCG	

54. Once these non-compliances have been corrected, the environmental component of the project can be considered closed.

## 4.2 Recommendations

- 55. Depending on the level of non-compliance there is no need to hire a contractor. Rather, UWSCG can develop and implement corrective actions with its own personnel.
- 56. Instrumental studies should be conducted as soon as possible to determine the source of water puddles near the central water main.
- 57. If the studies confirm that the source of the existing puddles is due to damage to the central water main, an appropriate procedure should be developed and the cause of the puddles should be eliminated.

## ANNEXES

Annex 1: Abasha Water Supply, Post-Construction Environmental Audit
Checklist

Required mitigation	Measures implemented			ted	
measures of enviromental impact	yes	partially	no	N/A	Comment
Site territory fenced fully	Х				The territory of the wells and service center is fully fenced.
Topsoil placed at original location	X				The territory where construction and/or remediation activities have been implemented has been thoroughly restored.
Construction waste and surplus/waste soil removed completely and disposed properly		X			No visible or uncontrolled inert waste was found in either the central water supply area or the well location. The area was completely cleaned up.
					Uncontrolled waste, including hazardous waste, was placed in the service center area.
Hazardous waste removed and disposed properly		X			Uncontrolled hazardous waste was placed in the building on the service center territory. The presence of hazardous waste was not observed in other areas of the project site.
Fuels and lubricants spills eliminated		X			Hazardous waste was placed uncontrolled in the building on the service center territory.
Contractor equipment and machinery removed	Х				Construction equipment was completely removed from the project area.
All temporary facilities removed and cleaned up	х				Temporary equipment was completely removed from the project area.
Streets with installed network reinstated to pre- construction or better conditions	X				The project area has been fully restored.

# ANNEX 2: GRM ORDER #431

United Water Supply Company of Georgia, LLC

Order Nº431

Tbilisi 26/11/2021

On Amending Order №196 dated October 30, 2018, of Director of United Water Supply Company of Georgia, LLC, on Grievance Redress Mechanism under the projects funded by the Asian Development Bank at United Water Supply Company of Georgia, LLC

In accordance with Clause 8, Article 8 of the Articles of Association approved by Order №54/N dated March 24, 2017, of Minister of Regional Development and Infrastructure of Georgia on Approving the Articles of Association of United Water Supply Company of Georgia, a Limited Liability Company

#### I hereby decree:

- Order Ne196 dated October 30, 2018, of Director of United Water Supply Company of Georgia, LLC, on Grievance Redress Mechanism under the projects funded by the Asian Development Bank at United Water Supply Company of Georgia be amended and Clause 5 of the Order be read as follows:
- "5. To promptly and effectively review and solve the grievance of the individual concerned, the Grievance Redress Commission (hereinafter the Commission) be established with the following composition:
  - a) Director of United Water Supply Company of Georgia, Chairperson of the Commission;
  - b) Deputy Director of United Water Supply Company of Georgia on Technical Issues, Member of the Commission;
  - c) Deputy Director of United Water Supply Company of Georgia on Financial Issues, Member of the Commission;
  - d) Deputy Director of United Water Supply Company of Georgia, Member of the Commission;
  - e) Deputy Director of United Water Supply Company of Georgia, Member of the Commission;
  - f) Deputy Director of United Water Supply Company of Georgia, Member of the Commission;
  - g) Deputy Director of United Water Supply Company of Georgia, Member of the Commission;
  - h) Head of Legal Department of United Water Supply Company of Georgia, Member of the Commission;

- i) Head of Environmental Protection and Permits Department of United Water Supply Company of Georgia, Member of the Commission; j) Head of Donor-Funded Projects Management Department of United Water Supply Company of Georgia, Member of the Commission; k) Head of State-Funded Projects Management and Supervision Department of United Water Supply Company of Georgia, Member of the Commission;
- I) Representative of Environmental Protection and Permits Department of United Water Supply Company of Georgia, the Commission Secretary".
- 2. The Order be enacted upon signature.