

# BI-ANNUAL ENVIRONMENTAL MONITORING REPORT

---

*Project Number: 43405-023*

*Reporting Period: January-June 2018*

*Loan Number: 3078-GEO (SF)*

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

**(FINANCED BY THE ASIAN DEVELOPMENT BANK)**

**Prepared by:** Ketevan Chomakhidze, Environmental Consultant, “United Water Supply Company of Georgia”

**For:** The Ministry of Regional Development and Infrastructure of Georgia and the Asian Development Bank

**Endorsed by:** Tinatin Lebanidze, Head, Department of International Procurement and Donors Relations

July 2018

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

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

## ABBREVIATIONS

<b>ADB</b>	Asian Development Bank
<b>DC</b>	Design Consultant
<b>DEPRP</b>	Department of Environmental protection, Resettlement and Construction Permit
<b>DIPDR</b>	Department of International Procurement and Donors Relations
<b>EA</b>	Executing Agency
<b>EARF</b>	Environmental Assessment and Review Framework
<b>EHS</b>	Environmental Health & Safety
<b>EIA</b>	Environmental Impact Assessment
<b>EIP</b>	Environmental Impact Permit
<b>EMP/ SSEMP</b>	Environmental Management Plan/ Site-Specific Environmental Management Plan
<b>ES/ SES</b>	Environmental Specialist/ Senior Environmental Specialist
<b>GoG</b>	Government of Georgia
<b>GRC</b>	Grievance Redress Committee
<b>GRM</b>	Grievance Redress Mechanism
<b>IPMO</b>	Investment Program Management Office
<b>USIIP</b>	Urban Sector Improvement Investment Program
<b>IA</b>	Implementing Agency
<b>IEE</b>	Initial Environmental Examination
<b>MF</b>	Multi-tranche Financing Facility
<b>MoENRP</b>	Ministry of Environment and Natural Resources Protection
<b>MoRDI</b>	Ministry of Regional Development & Infrastructure
<b>NEA</b>	National Environmental Agency
<b>SC</b>	Supervision Consultant
<b>UWSCG</b>	United Water Supply Company of Georgia
<b>WSS</b>	Water Supply & Sewerage

## Contents

PART I – INTRODUCTION .....	7
<b>1.1 Construction activities and project progress during the previous 6 months .....</b>	<b>7</b>
<b>A. General information about the program/subprojects .....</b>	<b>7</b>
<b>B. Construction activities implemented during the reporting period (January-June 2018).....</b>	<b>8</b>
1.2 Changes in Project Organization and Environmental Management Team ...	9
1.3 Relationships with Contractors, Owner, Lender, etc .....	13
PART II - Environmental Monitoring .....	15
<b>D. Monitoring Measurement Data .....</b>	<b>17</b>
PART III - Environmental management.....	22
<b>3.1 The Environmental Management System, Site-Specific Environmental Management Plan (SSEMP) and Waste Management Plans (January-June 2018).....</b>	<b>22</b>
<b>3.2 Site Inspections and Audit .....</b>	<b>23</b>
<b>3.3 Non-Compliance Notices.....</b>	<b>27</b>
<b>3.4 Corrective Action Plans.....</b>	<b>27</b>
<b>3.5 Actions taken to reflect the findings of ADB mission carried out on 27-30 January 2018 .....</b>	<b>31</b>
<b>3.6 Consultations and Complaints .....</b>	<b>34</b>
PART IV – CONCLUSIONS AND ACTION PLAN FOR THE NEXT PERIOD.....	40
<b>4.1 Conclusions and recommendations .....</b>	<b>40</b>
<b>4.2 Action Plan for the next period .....</b>	<b>42</b>
ANNEXES:.....	43
ANNEX A: MONITORING DATA.....	43
ANNEX B: PROJECT PHOTOS.....	49
Annex C: NON-COMPLIANCE NOTICES.....	54
ANNEX D: IMPLEMENTATION REPORT ON THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA) /INITIAL ENVIRONMENTAL EXAMINATION (IEE) MITIGATION REQUIREMENTS: .....	63
ANNEX E: DETAILED PROCEDURES for GRM SYSTEM IMPLEMENTATION .....	68
ANNEX F: WEEKLY ENVIRONMENTAL MONITORING REPORTS .....	70
ANNEX G: CORRECTIVE ACTION PLANS.....	78
ANNEX H: LIST OF CONSULTATION MEETINGS .....	83
ANNEX I: LIST OF MEETINGS ATTENDED BY Mr.ZAZA KHELADZE .....	84

- Table 1:** Project progress during the previous 6 months
- Table 2:** List of contracts under T3 – Kut-01, Ure-01, Ure-02 and Aba-01
- Table 3:** Parametric Measurement Guidelines
- Table 4:** Noise Level Guidelines
- Table 5:** Monitoring measurements under KUT-01
- Table 6:** Monitoring measurements under URE-01
- Table 7:** Status of Environmental management plans
- Table 8:** The Schedule of Conducted Audits and Monitoring during the Reporting Period
- Table 9:** Actions taken for implementation of mitigation measures under Kut-01, Ure-01 and Ure-02 projects by the end of June 2018
- Table 10:** Status of Findings of ADB Mission Carried Out on 27 – 30 January 2018
- Table 11:** Status of implementation of action plan of July-December 2017
- Table 12:** Recommendations to address Environmental Issues
- Table 13:** Conduct monitoring of environmental quality under Kut-01 and Ure-01 projects at each site

## PART I – INTRODUCTION

### 1.1 Construction activities and project progress during the previous 6 months

#### A. General information about the program/subprojects

1. The present Bi-annual Environmental Monitoring Report covers January-June 2018 time period.
2. 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.
3. The Investment Program will improve infrastructure through the development, design and implementation of a series of subprojects, each providing improvements in a particular sector (water supply and/or sewerage) in one town. Subprojects will rehabilitate existing infrastructure and/or create new and expanded infrastructure to meet the present and future demand. Water supply improvements will include source augmentation and head works, pumping systems, treatment facilities, transmission and distribution network; and, sewerage improvement works will include sewer network, pumping stations, main collectors and waste water treatment plants.
4. 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)

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

5. **<sup>1</sup>Construction of Water Supply and Wastewater Network in Ureki/Phase 3 (URE-01)**. The project comprises of the construction of 1 water supply pumping station and 31 sewage pumping stations (Shekviteli - 18, Ureki - 13; construction of new reservoirs (2,000 m<sup>3</sup> x 3,000 m<sup>3</sup> and 1 x 1,200 m<sup>3</sup>); 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.

---

<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.

6. **Construction of Wastewater Treatment Plant in Ureki (URE-02).** The project comprises of the construction of new Wastewater Treatment Plant with the capacity of 6,570 m<sup>3</sup>/day.
7. **Construction and Rehabilitation of Water Supply System in Kutaisi/Phase 2 (KUT-01).** The project envisages construction of Kvitiri 973 m<sup>3</sup>/h capacity and Mukhrani 660 m<sup>3</sup>/h capacity pumping stations; Reservoirs - construction of Near East and Mukhrani reservoirs with the capacity of 9,000 m<sup>3</sup> (2x4,000+1,000). Distribution network - 332.1 km.
8. **Construction of New Transmission Line in Abasha (Aba-01).** 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.

**B. Construction activities implemented during the reporting period (January-June 2018)**

**Table 1: Project progress during the previous 6 months**

**KUT-01**

<b>Site</b>	<b>Pipe Diameter (mm)</b>	<b>Installed</b>
Pipes, Concrete Surface, Superstructure Works undertaken during January-June 2018	PE 100-pipes OD 50	97.0%
	PE 100-pipes OD 63	95.0%
	PE 100-pipes OD 75	96.0%
	PE 100-pipes OD 90	98.0%
	PE 100-pipes OD 110	96.0%
	PE 100-pipes OD 125	98.0%
	PE 100-pipes OD 140	100.0%
	PE 100-pipes OD 160	96.0%
	PE 100-pipes OD 180	84.0%
	PE 100-pipes OD 200	85.0%
	PE 100-pipes OD 225	90.0%
	PE 100-pipes OD 250	100.0%
	PE 100-pipes OD 280	55.0%
	PE 100-pipes OD 315	100.0%
	PE 100-pipes OD 355	89.0%
	PE 100-pipes OD 400	100.0%
Concrete Surface	55%	

## URE-01

Site	Water Mains Installation
<b>URE-01</b>	
Works undertaken during January-June 2018	23.502 km of PE 100 pipes OD 710, SDR 11 installed – 99% 2.482 km of Carbon Steel pipes OD 710, SDR 11 installed – 97%
Site	Water network
Works undertaken during January-June 2018	53.47 km of HDPE pipes DN 25-560 – 100%
Site	Sewerage network
Works undertaken during January-June 2018	68.417 km of PE 100 and corrugated pipes OD 110-500 mm, SDR 11 installed – 97%
Site	Construction of Reservoir #1
Works undertaken during January-June 2018	Excavation Works – 100% Drainage Installation Works – 90% Reinforced Concrete Works – 100%
Site	Well Field
Works undertaken during January-June 2018	Drilling Works – 100%
Site	WS Pumping Station
Works undertaken during January-June 2018	Construction Works – 100%
Works undertaken during January-June 2018	Sewer PE Pumping Station Installation Works – 80%

## URE-02

Site	Effluent Pipe
Works undertaken during Jan-June 2018	Effluent collector – 100%
	Construction of WWTP – 100%

9. No constructing activities are started under Aba-01 project as yet.

### 1.2 Changes in Project Organization and Environmental Management Team



## Agencies Involved in Investment Program Implementation

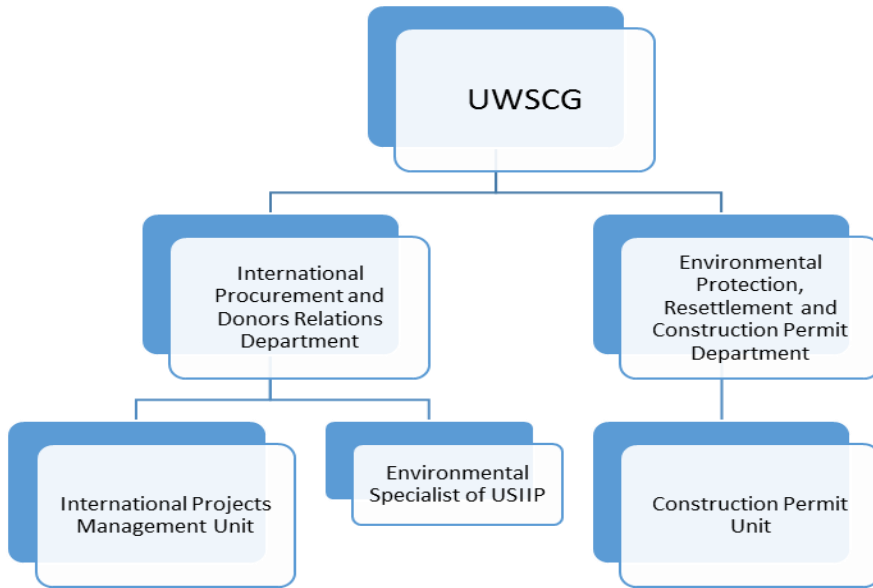
10. The following agencies are involved in implementing the Investment program: Ministry of Regional Development and Infrastructure (MoRDI) is the Executing Agency (EA) responsible for management, coordination and execution of all activities funded under the loan. MoRDI has overall responsibility for compliance with loan covenants.
11. Ministry of Environmental Protection and Agriculture of Georgia (MEPA). MEPA has the overall responsibility for protection of environment in Georgia. The Department of Permits of MEPA is responsible for reviewing EIAs and for issuance of the Environmental Permits. MEPA is the main state body pursuing state policy in the sphere of environment. Their functions for regulating economic or development activities with regard to environmental protection include:
  - Issuing permits for project development (Environmental Decision)
  - Setting emission limits and issuing surface water intake and discharge consents
  - Responding to incidents and complaint
12. United Water Supply Company of Georgia (UWSCG) is the implementing agency (IA), which is responsible for administration, implementation (design, construction and operation) and all day-to-day activities under the loan. In June 2018, the Director and Deputy Director of UWSCG were changed. Ms. Ekaterina Galdava was appointed as the new director, Ms. Maia Gikoshvili became the new Deputy Director. Investment Program Management Office (IPMO) under UWSCG is an International Procurement and Donors Relations Department. Department of Environmental Protection, Resettlement and Construction Permit (DEPRP) under USIIP replaced the existing Unit of Resettlement and Environmental Protection and consist of six staff members, including Head of Department and Head of Construction Permit Unit.
13. UWSCG as responsible IA for the project recruited a Supervision Consultant (SC) - Eptisa. The national and international team of consultants assists UWSCG in the supervision of the construction of subprojects under the USIIP. The SC also provides capacity building training to contractor staff in the management and operation and maintenance of the subprojects. The SC assists UWSCG in ensuring that the subprojects are implemented according to the specified standards. SC assignment also includes the supervising of the implementation of the environmental management plans.
14. All mitigation measures during construction have to be implemented by the contractor and these are monitored by the supervision consultant (SC). To ensure the smooth implementation of <sup>2</sup>SEMPs, Site Specific EMPs and Topic Specific EMPs of subprojects, an Environmental Management Specialist (EMS) is employed by the SC/Eptisa. SC/EMS conducts routine observations and surveys of project sites, issues non-compliance notes, prepares quarterly environmental reports and submits these to UWSCG.
15. The Contractor has the following obligations:
  - to prepare Site Environment Management Plans SEMPs with further Site Specific EMPs Topic Specific EMPs;
  - to employ Environmental Consultant responsible for developing and implementing the construction phase SEMPs and for providing the corresponding information to UWSCG and SC;
  - to develop Solid Waste Disposal Plan and agreed the MEPA and Local Government

---

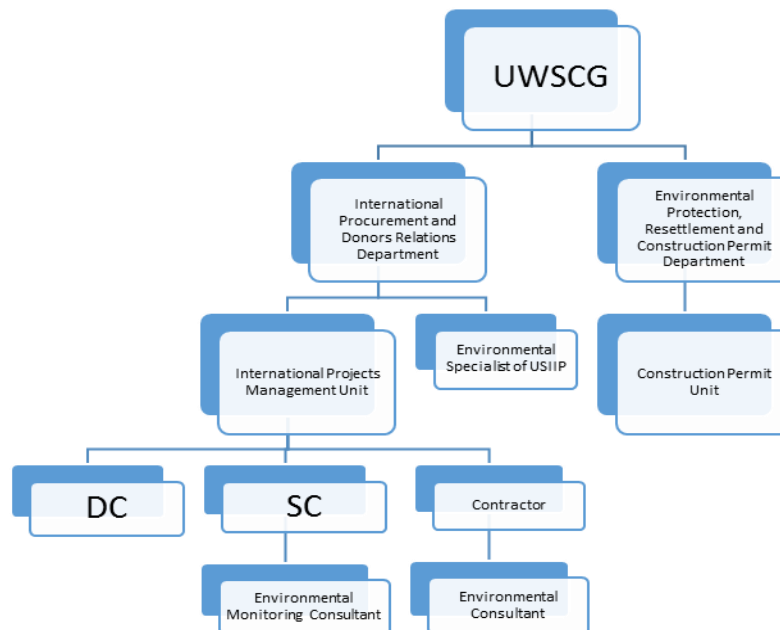
<sup>1</sup>According to new Monitoring Manual of ADB for Environmental Safeguards Implementation, since June 2018 instead of Site Specific Environmental Management Plans (SSEMPs) a "Site Environment Management Plan" (SEMP) with further Site Specific EMPs and Topic Specific EMPs must be developed by the Contractor.

16. DC is responsible for developing and incorporation of mitigation measures in design and construction.
17. The environmental specialist (ES) is hired by UWSCG under the USIIP to assist and advise the DEPRP in USIIP program implementation in compliance with the ADB Safeguard Policy Statement 2009 and National Legislation, and oversee the work of DCs and SCs in safeguards compliance. ES supports DEPRP in EARF implementation, in particular, reviewing IEE/EIA Reports and overseeing implementation of SEMP's and in training and capacity-building activities. The ES prepares bi-annual and annual environmental monitoring reports and submits to ADB.
18. DEPRP is responsible for the implementation of mitigation and monitoring measures during construction and operation of subprojects under USIIP. Currently DEPRP is staffed with a Head of Department, Head of Construction Permission Unit and 4 specialists, those are responsible for resettlement, environmental protection and construction permission issues.
19. ADB is the donor financing the Investment Program Environmental management organization is shown in Figure 1 and Figure 2.

**Figure 1:** Structure Diagram of the Environmental Management Unit of UWSCG



**Figure 2:** Structure Diagram of the Agencies Involved in Investment Program Implementation



### 1.3 Relationships with Contractors, Owner, Lender, etc

20. Relationships with Contractors, as normal working relationships. At the working level, coordination of environmental issues has been satisfactory, the government agencies, UWSCG, consultants and contractors are in frequent communication and consultation.
21. Ministry of Regional Development and Infrastructure (MoRDI) is the Executing Agency (EA) responsible for oversee progress and provide guidance on the investment program implementation; convene regular meetings in consultation with the SC Chairperson and UWSCG; ensure compliance with investment program covenants.
22. Oversight of the USIIP with regards to environmental management is the responsibility of the environmental safeguards team, in particular UWSCG/DEPRP and the Environmental Specialist of USIIP.
23. The team has constant communication with the Supervision Consultant, Contractor, reviews/ comments all environmental reports submitted by DC, SC and contractors.
24. All SSEMPs are prepared by Contractor, endorsed by SC and approved by UWSCG/DEPRP.
25. SC is responsible for environmental capacity building, monitoring of implementation of SSEMPs and for developing quarterly reports. The Contractor has a full time Environmental Specialist who carries out day to day monitoring as submits a monthly progress reports.
26. ADB oversees project sites regularly and gives clear instructions for the project sites improvements with regard to environmental safeguards.
27. To resolve the observed environmental safeguard issues, the regular Environmental Meetings are organized with participation of UWSCG/IPMO/DEPRP, Eptisa, Contractors. During the meetings environmental issues and implementation of the mitigation measures are discussed.
28. A Grievance Redress Committee has been established within REG-01 in Kutaisi that will functional for KUT-01 project as well. GRM was established for URE-01 and URE-02 projects within the July-December 2016.
29. Contractor of KUT-01 project operated during the reporting period with the following sub-contractor:
  - LTD DAGI AND COMPANY (CONCRETE ROAD WORKS)
  - LLC DAGI+ (ASPHALT PAVEMENT WORKS)
  - LLC SABA (DCI PIPELINE WORKS AND HDD WORKS)
  - LLC CONSTRUCTION SERVICE (AQUEDUCT WORKS)
  - LLC PRIME CONCRETE (SUPERSTRUCTURE WORKS)
  - LLC KONSTANTA (PAVING STONE WORKS)
  - INDIVIDUAL ENTREPRENUR LERI BARKALAI (SAKDARI TRANSFORMER WORKS)
  - LLC GES (APARTMENT CONNECTION WORKS)
30. Below are the list of permits and subcontractors of "SMK Ulusal Insaat Ve Ticaret A.S. (Turkey)" under the Kut-01 project
  - Kutaisi Municipality – contract was signed for disposal of Municipal Waste from project sites to the Kutaisi landfill

- Permit issued to SMK by the Ministry of Environment and Natural Resources Protection of Georgia (Decree #i-902) – on Construction and Exploitation of the Asphalt plant
  - License issued to SMK by the National Environmental Agency of the MoENRP – for mineral extraction (gravel, ballast)
31. CC has an agreement concluded with “Medical Technology” Ltd for disposal of hazardous waste in December of 2016. Agreement also concluded with Ltd “Shota lobidze“ for paper waste disposal.
32. Below are the list of sub-contractors of PERI Ltd (Ure-01 project) for Disposal of Municipal Waste and extraction of minerals (gravel, ballast, etc)
- Ureki Municipality - contract was signed for disposal of Municipal Waste from Ureki WWTP site to the Ureki landfill
  - License issued to Ltd Peri by the MoENRP for mineral extraction (gravel, ballast) on the basis of the purchase agreement signed between the Ltd “Peri” and Ltd “Anagi”
  - Ltd “Sanitari” – contract was signed for disposal of hazardous waste
33. Below are the list of sub-contractors of Pfeiffer (Ure-02 project) for Disposal of Municipal Waste and extraction of minerals (gravel, ballast, etc)
- Ozurgeti Municipality - contract was signed for disposal of Municipal Waste from Ureki WWTP site to the Ozurgeti landfill
  - Ltd “Sanitari” – contract was signed for disposal of hazardous waste
  - Georgian Solid Waste management Company for disposal of Solid Waste.
34. Project organization for the awarded contracts listed above is given in the table below:

**Table 2: List of contracts under T3 – Kut-01, Ure-01, Ure-02 and Aba-01**

Contract #	Sub-project Title	Employer	Contractor	Contract Signature date	Contract Final Date
Contract No: P43405- ICB-KUT-01	Kut-01	UWSCG	SMK Ulusal Insaat Ve Ticaret A.S. (Turkey)	22-Apr-15	8-Jun-18
Contract No: P43405-ICB- URE-02	Ure-02	UWSCG	JV of Ludwig Pfeiffer Hoch-und Tiefbau GmbH and Co.KG ProtechnoSrl (Germany) / Aritim (Turkey)	30-Apr-15	9-Jun-17
Contract No: P43405-ICB- URE-01	Ure-01	UWSCG	JV of Peri Ltd (Georgia) Leading Partner and Slon LLC (Azerbaijan)	28-Oct-14	22-Nov- 17
Contract No: P43405-DC- ABA-01	Aba-01	UWSCG	AS Inshaat–N, LLC (Azerbaijan)	13-Oct-17	13-Oct- 18

## PART II - ENVIRONMENTAL MONITORING

35. Individual and joint on-site monitoring activities were conducted by Environmental Monitoring Specialist of SC and Environmental Specialist of DEPRP under USIIP on a regular basis, during the period January-June 2018. Unscheduled monitoring visits were carried out and non-compliance notes has been issued to the contractor as needed. Mitigation measures to reduce major environmental impacts have been instructed to contractors during the monitoring visits.
36. The monitoring activities included:
  - The monitoring of compliance of construction activities under KUT-01 project sites to the overall project EMP/SSEMPs;
  - The monitoring of compliance of construction activities under the URE-01 project sites to the overall project EMP/SSEMPs;
  - The monitoring of compliance of construction activities under the URE-02 project sites to the overall project EMP/SSEMPs
37. No monitoring activities have been carried out for ABA-01 project as yet.
38. Environmental Monitoring Specialist hired by contractor under the KUT-01, URE-01 and URE-02 subprojects conducted the day-to-day monitoring of the construction sites, developed the weekly monitoring reports (see Annex F, Sample WMR of contractors) and submitted to SC/Eptisa.
39. Environmental Monitoring Specialist of SC/Eptisa developed quarterly monitoring reports for UWSCG/ DEPRP based on the weekly reports submitted by Contractor and based on environmental site inspection.
40. Environmental Specialist of USIIP performed monitoring of contractor's performance with the approved EMPs/SSEMPs, environmental standards and other environmental commitments of the contractor. ES of USIIP developed bi-annual environmental monitoring reports and submitted to ADB based on the quarterly reports prepared by SC and monitoring results.
41. The USIIP's Environmental Impact Monitoring and Mitigation is carried out in accordance with the updated EMPs and SSEMPs prepared by the Contractors. The construction activities affecting the environment are as follows:
  - Excavation works
  - Removal of soil
  - Removal of vegetation
  - Backfilling of trenches
  - Reinstatement activities
42. In accordance with the IEE, and the accompanying Environmental Monitoring Plan (EMP), the Contractor is required to undertake parametric measurements and observations on air quality, noise and socio-cultural resources. Locations for the measurements were initially identified in the IEE. Accordingly, the monitoring guidelines were set as shown in the table 3 below only Kut-01 and Ure-01 are reported in this EMR. All construction activities are 100% completed under Ure-02 project.

**Table 3: Parametric Measurement Guidelines**

Parameters	Frequency & Location	Remarks
<b>Kut-01</b>		
Air Quality	Every 3 months Mukhnari Reservoir, Networks, Transmission Main	Watering site during excavation works to avoid dust spreading  Conduct measurements of Dusts Mg/m <sup>3</sup> ; CO Mg/m <sup>3</sup> ; NO <sub>2</sub> Mg/m <sup>3</sup> ; SO <sub>2</sub> Mg/m <sup>3</sup>
Noise	Every 3 months Mukhnari Reservoir, Networks, Transmission Main	Ensure that all equipment & vehicles used for construction activity are in good condition  Limiting working hours to 8 am – 6 pm
Impact on Flora and Fauna	Monthly during the site Inspection and audit	Avoid tree cutting In unavoidable cases, plant four trees of same species for each tree that is cut for construction
Cultural heritage Disturbance to cultural resources	Every time along the alignment Archaeological & Cultural Properties	Contractor shall put in place a protocol for conducting any excavation work, to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved.  Calling in the state archaeological authority if a find is suspected, and taking any action they require to ensure its removal or protection.
<b>Ure-01</b>		
Air Quality	Every 3 months Reservoir #1, Pumping Station, Well Fields, Networks, Transmission Main	Watering site during excavation works to avoid dust spreading  Conduct measurements of Dusts Mg/m <sup>3</sup> ; CO Mg/m <sup>3</sup> ; NO <sub>2</sub> Mg/m <sup>3</sup> ; SO <sub>2</sub> Mg/m <sup>3</sup>
Noise	Every 3 months Reservoir #1, Pumping Station, Well Fields, Networks,	Ensure that all equipment & vehicles used for construction activity are in

Parameters	Frequency & Location	Remarks
	Transmission Main	good condition  Limiting working hours to 8 am – 6 pm
Impact on Flora and Fauna	Monthly during the site monitoring.	Avoid tree cutting In unavoidable cases, plant four trees of same species for each tree that is cut for construction
Cultural heritage Disturbance to cultural resources	Every time along the alignment Archaeological & Cultural Properties	Contractor shall put in place a protocol for conducting any excavation work, to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved.  Calling in the state archaeological authority if a find is suspected, and taking any action they require to ensure its removal or protection.

43. There are no protected areas, wetlands, mangroves, or estuaries. Trees, vegetation (mostly shrubs and grasses), and animals in the subproject sites are those commonly found in built-up areas. The geological structure of the area is stable and no potential land subsidence is foreseen.

#### A. Monitoring Measurement Data

44. Environmental monitoring of dust, air condition, noise and vibration under Kut-01, Ure-02 and Ure-01 projects are performed as indicated in the relevant EMPs/SSEMPs (on the bi-annual basis).
45. The parameters measured for the monitoring data at the construction sites are as follows: dust, carbon monoxide, nitrogen dioxide, sulfur dioxide, vibration and noise.
46. Noise impacts should not exceed the levels presented in Table 4, in accordance with Georgian regulations - Decree No. 297/N “On Approval of Environmental Quality Norms” (August 16, 2001 of the Ministry of Labor, Health and Social Affairs) and IFC/World Health Organization (WHO) 1999, or result in a maximum increase in background levels of 3 dB at the nearest receptor location off-site.



**Table 4: Noise Level Guidelines**

Noise	dB		dB	
	National Regulations		IFC/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

47. Location and data of measured parameters are provided in Annex A. The next monitoring measurements will be conducted in September 2018 and results will be reflected in the next EMRs of January-June 2018 as it defines in EMP/SSEMPs.
48. Environmental quality measurements were carried out by contractor in June 2018 at various construction sites, including nearest sensitive receptors in Kutaisi (See Table 5 and Annex A). According to data received in June 2018 the obtained results for noise level do not exceed the National Environmental Standard (Maximum Permissible Level), baseline measurement data and International IFC/WHO Standards (please see Table 4). However some measurement results, such as PM exceed the WHO guideline values and therefore additional mitigated measures are required. These mitigation measures are provided in Table 12: Recommendations to address Environmental Issues.
49. All measurements were carried out at construction sites, were temporary and conducted during the daytime from 14:00 pm to 16:00pm. The reason for sampling during this period was that no construction activities occurred outside daylight hours. No complaints were received from the local population about the noise during the reporting period.

**Table 5: Monitoring measurements under KUT-01**

Plaice of measurement	Dust Mg/m <sup>3</sup>		CO Mg/m <sup>3</sup>		No <sub>2</sub> Mg/m <sup>3</sup>		SO <sub>2</sub> Mg/m <sup>3</sup>		Noise dB  Daytime 07:00-22:00  <i>Note: National and WHO standards are provided in Table 4</i>		Radiation mR/h		Vibro - acceleration mm/sec	
	standard	result	standard	result	standard	result	standard	result	standard	result	standard	result	standard	result
National standards	0,5		5,0		0,2		0,5		See Table 4		30		4.0	
IFC/WHO standards	(*IFC does not have a standard for "inorganic dust". Instead IFC applies standards for PM2.5 and PM10). PM10 – 0,02/1 Year 0,05/24 Hour PM2.5-0,01/1 Year 0,025/24 Hour		N/A		0,2/1 Hour 0,04/1 Year		0,5- 10 min 0,02 - 24 Hours		See Table 4					
Reservoir at Godogani 42014i06.07ii N	0.5	PM <sub>10</sub> -	5.0	2.1	0.2	0.01	0.5	≥ 0.1	55	47.6	30	10	4.0	2.4

42042i25.89ii E		0.04 PM <sub>2.5</sub> - 0.15						70						
Rustaveli Ave. 4201559.13N 4241232.80E (Industrial; commercial)		PM <sub>10</sub> - 0.06 PM <sub>2.5</sub> - 0,09		2.4		0.02		≥ 0.1		63.0		11		3.0
Aslanikashvili Street 421650.79 N 424217.82 E (Industrial; commercial)		PM <sub>10</sub> - 0.07 PM <sub>2.5</sub> - 0.17		2.2		0.02		≥ 0.1		70.1		14		0.1
Akhalgazrdobis Ave. 421431.40N 424241.33E (Industrial; commercial)		PM <sub>10</sub> - 0.23 PM <sub>2.5</sub> - 0.17		2.6		0.02		≥ 0.1		64.4		12		4.3
Skhirtladze street 42016i29.11N 42041i15.76E (Industrial; commercial)		PM <sub>10</sub> - 0.19 PM <sub>2.5</sub> - .0.28		3.1		0.04		≥ 0.1		69.0		6		2.7

50. No monitoring measurements under Ure-02 projects were conducted during the reporting period of January-June 2018 due to the fact that all concrete works are 100% completed.
51. Monitoring measurements under Ure-01 was conducted in various construction sites, including nearest sensitive receptors by the National Environmental Agency under the MEPA in June 2018 (See Table 6 and Annex A). Location and data are included in the table below. The next monitoring measurements will be conducted in September 2018 and results will be reflected in the next July-December EMR 2018. According to data received in November 2018 the obtained results are within the National and International Environmental Standard (Maximum Permissible Level)/IFC/WHO and baseline measurement data and therefore additional mitigations are not required. All measurements were carried out at construction sites, were temporary and conducted during the daytime from 13:30 pm to 16:30 pm to correspond with the project working hours. No complaints were received from the local population about the noise during the reporting period.

**Table 6: Monitoring measurements under URE-01**

N	Place of measurement	Samples #	Results				
			Dust Mg/m <sup>3</sup>	CO Mg/m <sup>3</sup>	NO <sub>2</sub> Mg/m <sup>3</sup>	SO <sub>2</sub> Mg/m <sup>3</sup>	Noise dB Daytime 07:00 - 22:00
	National Environmental Standard (Maximum Permissible Level)		0,5	5,0	0,2	0,5	55 Residential; Institutional; Educational  70 Industrial; commercial  <i>Note: Please see IFC/WHO in table 4 above</i>
1	Pumping Station X 0730383 Y 4649261	1	0.004	0.16	0,001	<0,1	42.1
		2	0.017	0.81	0,008	<0,1	43.0
		3	0.018	0.62	0,003	<0,1	43.3
		4	0.002	0.31	0,001	<0,1	42.2
2	Shekvetili X 0729754 Y 4644722	1	0.005	1.15	0,003	<0,1	50.6
		2	0.007	1.28	0,002	<0,1	51.4
		3	0.006	1.38	0,003	<0,1	50.8
		4	0.008	1.52	0,002	<0,1	51.9

N	Place of measurement	Samples #	Results				
			Dust Mg/m <sup>3</sup>	CO Mg/m <sup>3</sup>	NO <sub>2</sub> Mg/m <sup>3</sup>	SO <sub>2</sub> Mg/m <sup>3</sup>	Noise dB Daytime 07:00 - 22:00
3	Natanebi X 0733131 Y 4643222 X 0723511 Y 4643927	1	0.004	0.17	<0,001	<0,1	40.0
		2	0.015	0.2	0,007	<0,1	42.3
		3	0.015	0.22	0,006	<0,1	41.7
		4	0.011	0.17	<0,001	<0,1	40.2
4	Tsvermagala Reservoir#1 X 0731266 Y 4649719	1	0.004	0.25	0,001	<0,1	40.2
		2	0.017	0.30	0,001	<0,1	40.8
		3	0.018	0.27	0,003	<0,1	40.3
		4	0.002	0.32	0,001	<0,1	40.5

## B. Health and Safety

52. No incident/near misses recorded during the reporting period January-June 2018. Near Misses forms will be developed and incidents will be recorded by contractors under Kut-01 and Ure-01 projects during the next reporting period, July-December 2018 and reflected in the next EMRs.

## PART III - ENVIRONMENTAL MANAGEMENT

### 3.1 The Environmental Management System, Site-Specific Environmental Management Plan (SSEMP) and Waste Management Plans (January-June 2018)

53. All SSEMPs under Kut-01, Ure-01 and Ure-02 projects were prepared by Contractor, endorsed by SC and approved by UWSCG and reviewed/commented by the RETA Regional Environmental Consultant of ADB under RETA 8663 - Ms. Ketii Dgebuadze.
54. Status of Environmental Management Plans and SSEMPs prepared within the previous reporting periods are summarized in the table below:

**Table 7: Status of Environmental management plans**

Management Plan	Status	Date of Submission
Waste management plan for construction phase Under Ure-01 project	Submitted	By end of December 2016
Environmental Management Plan/Site-Specific EMP (SSEMP) under Ure-01 project Rez-01	Submitted, and approved by UWSCG	SSEMP for Ureki WWTP was prepared in November 2016
Waste management plan for construction phase Under Ure-02 project	Submitted	By end of December 2016
Waste management plan for construction phase Under Kut-01 project	Submitted	By end of December 2016
Environmental Management Plan/Site-Specific EMP (SSEMP) under Kut-01 project Godogani Reservoir	Submitted	SSEMP for Godogani Reservoir was prepared and approved in August 2016

### 3.2 Site Inspections and Audit

55. Regular site monitoring visits were carried out during the reporting period by the Supervision Consultant Eptisa, and Environmental Specialist of UWSCG/USIIP for Ure-01, Ure-02 and Kut-01 projects. Some monitoring visits were conducted jointly by the SC/EMS and ES of USIIP. During the field visits a number of EHS issues were noted and brought to the attention of the Environmental Consultant and the H&S manager of Kut-01, Ure-02 and Ure-01 project. Mitigation measures were then discussed with the contractor on-site and detailed instructions were given. Good Practice in compliance with Georgian and international H&S standards were therefore enforced in accordance with the Contractor's contract for Kut-01, Ure-02 and Ure-01 projects.

56. Site inspection monitoring and audit during the reporting period have been carried out on: 26-28 January 2018; 17-18 April 2018; 23, 28 April 2018; 15 May 2018; 22 May 2018 and 29-30 June 2018. The schedule of conducted monitoring and audit during the reporting period is presented in the Table 8 below.

**Table 8: The Schedule of Conducted Audits and Monitoring during the Reporting Period**

#	Ure-01, Reg-02 and Tbilisi Office Building Site visits	Organization	Date
1	Day-to-Day Site Inspection	Environmental Specialists of Contractor under Ure-01 and Reg-02 Projects	1 January – 30 June 2018
	Site Monitoring and Audit	Environmental specialist of USIIP, environmental specialists of Eptisa, International-Regional	26-28 January 2018

#	Ure-01, Reg-02 and Tbilisi Office Building Site visits	Organization	Date
		Environmental Safeguards Consultant Ms. Ketil Dgebuadze and Mr. Duncan Lang, Environmental Specialist, ADB	
2	Site Monitoring and Inspection	Environmental specialist of USIIP, environmental specialists of Eptisa	17-18 April 2018
	Site Monitoring	Environmental specialist of USIIP, environmental specialists of Eptisa, International-Regional Environmental Safeguards Consultant Ms. Ketil Dgebuadze and Mr. Duncan Lang, Environmental Specialist, ADB as well as about 40 participants of "Training Workshop and Regional Exchange on Monitoring of Environmental Safeguards Implementation" (Batumi, Georgia, 19-21 April, 2018)	21 April 2018
3	Site Monitoring	Environmental specialist of Eptisa	28 April 2018
4	Site Monitoring	Environmental specialist of USIIP and Environmental specialist of Eptisa	22 May 2018
	Site Monitoring and Inspection	Environmental specialist of USIIP and Environmental specialist of Eptisa	15 May 2018
5	Site Monitoring	Environmental specialist of USIIP	29-30 June 2018

57. On April 21 2018, a site visit was held within the framework of the "Training Workshop and Regional Exchange on Monitoring of Environmental Safeguards Implementation" (Batumi, Georgia, 19-21 April, 2018) in Ureki, Georgia. About 40 regional representatives from Azerbaijan, Armenia, Kyrgyzstan, Kazakhstan, Turkmenistan, Uzbekistan, Tajikistan participated in it. Site visit was also attended by the representatives of ADB/Manila Head Office Mr.Duncan Lung, ADB/RETA Ms.Ketil Dgebuadze, Contractor, Supervision Consultant and UWSCG/USIIP/IPMO.

58. The following sub-projects have been visited under the "Urban Services Improvement Investment Program, T3 (43405-023) :

- URE-01 project provides for the construction of a water supply and sewerage network in Ureki / Phase 3.
- URE-02 provides for the construction of a Waste Water Treatment Plant in Ureki.

59. The 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 (provincial capitals and secondary towns) through improved urban water and sanitation (WSS) services and will be financed by the ADB through its Multi-tranche Financing Facility (MFF), with a total cost of \$500 million, this Investment Program will be implemented in seven selected towns in six tranches of funding over a period of 9 years beginning in 2011.

60. Ureki is located only 51km away from Batumi and visitors could simultaneously see two different projects: Ure-01 and Ure-02 under USIIP. The proposed site under Ure-

01 were a Reservoir No.1 and Pumping Station. Concrete works of both components are completed by 100%.

61. The proposed site under Ure-02 was Ureki WWTP. The concrete works of WWTP is also completed.
62. The WWS systems were installed to meet the demands of growing population. With the government initiative to develop Ureki as a tourist destination, the water demand is likely to grow significantly as will grow the waste water production. According to government estimates, water Supply and WWTP will meet with 30,000 equivalents of the population (PE), calculated for 2040.
63. The following main environmental issues faced during the construction phase were suggested to monitor by participants under URE-01 and URE-02 projects:
- *Loss of topsoil due to incorrect stripping and storage*
  - *Dust generation during construction*
  - *Incorrect Waste Management (Hazardous Waste mixing with non-hazardous waste)*
  - *Incorrect surplus soil management*
  - *Inert waste management*
  - *Concrete mixer trucks washout activities*
64. Other issues monitored by the participants included:
- *Management of occupational health and safety issues*

#### **Major Environmental issue under Ure-01 project.**

##### **Top-Soil Management**

65. Small part of topsoil stockpiled according to the GEO regulations has been mixed with subsoil during backfilling and leveling activities of the territory of Pumping Station under Ure-01 project. The ADB's Mission (April 2017) requested contractor to prepare corrective action plan in cooperation with Supervision Consultant and improve non-compliance within the identified deadline.

Status: Completed. Corrective action plan regarding incorrect disposal of topsoil was prepared by contractor. The Topsoil was separated from subsoil and stockpiled separately in accordance with Georgian regulations.

Photo 1: Improved top-soil management under Ure-01/PS





**66.** Following observations were made by visitors under Ure-01 project:

#### Reservoir #1 Site (URE-01)

- Separate waste containers for municipal and hazardous waste at the site with signatures, placed at special designated area with roofing and concrete base
- Trees at the construction site were properly protected and fenced to avoid its damage
- Proper warning and information signs were arranged at the perimeter of the site
- Safety signs/tapes and trench side barriers around of deep open excavation were installed from all sides to avoid accidents

#### Pumping Station (URE-01)

- Top soil at the site were managed properly to avoid its losing
- Piles of soil at the construction territory were managed properly
- Site internally were arranged properly with signage and cleaned regularly
- Gate is closed and locked to avoid non-authorized entrance at the site

**67.** Following observations were made by visitors under WWTP (URE-02)

- Proper fuel/oil spill response items (sand, sawdust, special containers) were available at the site
- Waste materials, including hazardous waste were removed timely and regularly
- Waste were placed only at the proper container and discharged timely
- Soil (surplus/accumulated soil) for backfilling purposes is managed/stored properly

**68.** During the site visit detailed presentations were carried out by the contractors on both projects.

69. There was an open discussion, many questions asked by the visitors were answered by the project team of USIIP and its environmental specialist.
70. These issues included, but were not limited to: the population equivalent for the project; the effectiveness of existing monitoring and reporting systems; environmental standards used for the project implementation; frequency of quality control of treated water; detailed description of treatment facilities, etc.
71. Visitors were informed about the monitoring and reporting system implemented by UWSCG/IPMO and presented all relevant documents existed at contractors temporary offices such as IEE, SSEMP, non-compliance notes, corrective action plans, compliant log. etc..
72. The following recommendation was suggested to the implementation unit on improvements in the environmental performance:
73. As the contraction activities on Reservoir #1, Pumping Station under URE-01 project and WWTP under URE-02 is completed major improvements can be concentrated on proper reinstatement activities.
74. At the end of the site visit the pine trees were symbolically planted by participants in the project area for reinstatement purposes of the project area.

### **3.3 Non-Compliance Notices**

#### **Kut-01, Ure-02 and Ure-01 projects**

75. The contractors were always informed on the detected non-compliances 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 monitored the improvements during the next monitoring visits. Unimproved environmental issues were qualified as non-compliances and notices issued to contractor (Annex C).
76. A summary of the identified issues during the site monitoring by EMS/SC and USIIP ES, recommended mitigations and the status of implementation is presented in Annex D.
77. Non-compliance notices have been issued by SC/Eptisa under Ure-01, Kut-01 and Ure-02 projects in following date: 26 March 2018; 17 May 2018; 24 April 2018 (see Annex C).

### **3.4 Corrective Action Plans**

78. For the purpose of resolving the observed issues, the Corrective Action Plans have been developed by the contractor under Kut-01 project (Sample CAP in presented in Annex G).
79. The regular Environmental Meetings were also carried out with the participation of UWSCG/IPMO/DEPRP, SC/Eptisa and contractors of Kut-01, Ure-01 and Ure-02 sub-projects. During the meetings environmental issues and implementation of the mitigation measures were discussed. Agreements were reached that contractors should respond to the findings of the compliance monitoring carried out by SC and UWSCG.

**Table 9:** Actions taken for implementation of mitigation measures under Kut-01, Ure-01 and Ure-02 projects by the end of June 2018

**Ure-01**

**URE-01**

Construction Site	Environmental Issues	Action taken
Ureki/Pumping Station	Entrance door and fencing of the construction site should be in better condition and complete	<p>Completed</p> <p><i>Note: Further improvements are needed for remove surplus waste soil that is temporarily located in the Construction area.</i></p> <p><i>Surplus soil will be used for reinstatement purposes for Reservoir #1 under the ure-01 sub-project.</i></p>
	Site internally should be arranged properly and cleaned regularly	
	All workers should be equipped with complete PPE	
	Piles of soil at the construction territory should be managed properly	
	Top soil should be separated from surplus waste soil and managed properly (fencing, signage, piling standard)	
	Safety tapes around open trenches should be installed	
	The site access road and internal roads should be better arranged (graveling)	
Ureki/Construction Materials Storage Area	Construction equipment should be in good condition	<p>Only Partially Completed</p> <p>(Recommendations to address Environmental Issues are provided in Table</p>
	Site fencing should be complete and with visible materials on it	
	Construction materials should be segregated precisely and stored	

Construction Site	Environmental Issues	Action taken
	properly	12)
	Site internally should be arranged properly (including signage) and cleaned regularly (animals should not be available at the site)	
	Site gate should be operation at every entrance or exit with relevant signage	
	Waste should be placed at the proper standard waste containers with labeling	
	Containers of lubricants should be managed properly (concrete flooring and relevant roofing)	
Ureki/Well Fields	Protect River bank alongside the Ureki Well fields	SC/EPTISA working on design of river bank protection.
	Contractor to install fencings for Ureki Well Fields	Completed (Please see Annex B – Photo of well fields).

#### KUT-01

Construction Site	Environmental Issues	Action taken
<b>Kut-01</b>		
<b>Godogani Reservoir</b>		
	Site should be properly fenced from all sides and equipped with lockable gate	Partially Completed (Recommendations to address Environmental Issues are provided in Table 12)
	Proper warning and information signs should be arranged at the entrance and perimeter of the site	Partially Completed (Recommendations to address Environmental Issues are provided in Table 12)
	Safety signs/tapes and trench side barriers around of deep open excavation should be installed from all sides to avoid accidents	<b>Not Completed</b> (Recommendations to address Environmental Issues are provided in

Construction Site	Environmental Issues	Action taken
		Table 12)
	Construction territory should be lighted adequately	Completed
	Trees at the construction site and nearby deep excavation zone should be protect to avoid its damage	Completed
	Safety tapes and fencing around concrete washing pit and proper sign should be installed	Completed
	Safety officer should be permanently available at the construction site	Partially Completed (Recommendations to address Environmental Issues are provided in Table 12)
	Oils or similar liquid containers should be stored properly at dedicated place	Completed
	Proper fuel/oil spill response items (sand, sawdust, special containers) should be available at the site	<b>Not Completed</b> (Recommendations to address Environmental Issues are provided in Table 12)
<b>Mukhrani Reservoir</b>		
	Construction waste should be removed timely and completely	Completed
	Safety signs/tapes should be installed around open trenches to avoid accidents	Partially Completed
	Waste should be placed only at the proper waste container	Completed
	Workers always should use complete PPE	Completed
	Site internally should be arranged properly and cleaned regularly	Partially Completed (Recommendations to address Environmental Issues are provided in Table 12)
<b>Network</b>		
	Construction activities information signs should be installed at each construction segment	Completed
	Safety signs/tapes around of all open trenches should be installed to avoid accident of population	Partially Completed (Recommendations to address Environmental Issues are provided in Table 12)
	Special blinking signs or flag men should be provided when passing streets to avoid disturbance of car movements	<b>Not Completed</b>
	Surplus waste soil should be removed and disposed in a proper place	Partially Completed (Recommendations to address Environmental

Construction Site	Environmental Issues	Action taken
		Issues are provided in Table 12)
	Construction materials should be brought when needed to avoid its long time disposal in the streets and disturbance of residents and businesses	Completed
	Enough and proper wooden/metal walkways/planks across open trenches should be installed	Partially Completed (Recommendations to address Environmental Issues are provided in Table 12)
	Resident houses nearby areas should be clean from construction materials to avoid disturbance of residents and businesses	Completed
	All transmission line construction segments should be cleaned/well organized on regular bases	Completed
	Workers always should use complete PPE	Completed
	Refilling/compaction and reinstatement process should bring site at the same or better condition as it was before construction	Completed

80. An Annual Environmental Compliance Safeguard Review Mission was carried out by ADB on 27-30 January 2018 to review environmental safeguards compliance of USIIP projects.

### 3.5 Actions taken to reflect the findings of ADB mission carried out on 27-30 January 2018

**Table 10: Status of Findings of ADB Mission Carried Out on 27 – 30 January 2018**

Project	Specific Issues	Deadline for submission/Implementation	Implementation Status
Status of findings of ADB mission carried out on 27-30 January 2018			
Ure-01 Rehabilitation of the Water Supply System in Ureki			
	<p>ADB request that the IPMO and the supervision consultants for the USIIP program employ dedicated Health and Safety personnel. These personnel must be additional to existing staff (particularly at IPMO level) to ensure that sufficient capacity is present to cover H&amp;S on this large portfolio of projects.</p> <p>The staff personnel must have the</p>		<p>All construction activities are completed now and therefore no H&amp;S Specialist under Ure-01 sub project was hired as yet.</p> <p>Contractor is strongly requested to fulfill above mentioned requirements as soon as construction works resumed.</p>

Project	Specific Issues	Deadline for submission/Implementation	Implementation Status
	<p>relevant qualifications and experience.</p> <p>Contractors must start recording all H&amp;S incidents, including near misses and provide these in a regular log to the Supervision Consultants and the PIU.</p> <p><u>No other major environmental issues were identified</u></p>		
Ure-02 Ureki WWTP			
	<p>ADB to formally request that the PIU and the supervision consultants for the USIIP program employ dedicated Health and Safety personnel. These personnel must be additional to existing staff (particularly at PIU level) to ensure that sufficient capacity is present to cover H&amp;S on this large portfolio of projects. The staff personnel must have the relevant qualifications and experience.</p>		<p>All construction activities are completed now and there is no need to hire H&amp;S Specialist under Ure-01 sub project.</p>
	<p>During the ADB Mission waste burning footprints have been revealed at one of the segregated waste disposal area, which is the non-compliance and not allowed at the construction site.</p>		<p>Completed and improved after the strong instruction of the contractor.</p>
	<p>Contractor requested SC to conduct customized training for CC environmental specialist related to waste management issues and ADB SPS requirements.</p>		<p>Completed, but since all construction activities are completed now on the site there is no need to conduct additional trainings on this matter.</p>
	<p>Supervision consultant and contractor to action all minor non-compliances or areas for improvement identified during the site visits including completion of</p>		<p>Completed.</p> <p>Segregation of waste with relevant signs</p>

Project	Specific Issues	Deadline for submission/Implementation	Implementation Status
	TBT for staff to reinforce the message no burning of waste is allowed; improving waste segregation, improving housekeeping; reinstalling safety signage and other tasks as outlined above.		installed is improved;
	CC does not have overall Accident Record Log with recorded near misses. ADB Mission requested to start keeping the mentioned records and reflect it in the next Bi-annual EMR.		All construction activities are completed now and there is no need to hire H&S Specialist under Ure-01 sub project.
	Contractors must start recording all H&S incidents, including near misses and provide these in a regular log to the Supervision Consultants and the PIU.		All construction activities are completed now and there is no need to hire H&S Specialist under Ure-01 sub project.
	ADB recommends PIU to start monitoring coliforms for WWTPs financed under the project in line with IFC/WB standards.		This issue is under discussion between the CC, SC and UWSCG.  The final decision will be taken during the next reporting period July-December 2018 and will be reflected in the relevant EMR.
<b>Kut-01 Rehabilitation of Water Supply System in Kutaisi Phase II</b>			
	<u>Concrete wash out pit</u> : At Godogani reservoir the concrete wash out area was fenced from three sides, but for easy usage CC was instructed by ADB Mission to install permanent door from one side		Completed
	Contractors must start recording all H&S incidents, including near misses and provide these in a regular log to the Supervision Consultants and the PIU.		Completed



**Table 11: Status of implementation of action plan of July-December 2017**

Recommendations: Ure-01	
Conduct monitoring of environmental quality under Ure-01 project at network site, Pumping Station and Rez-01 by the end of March 2018.	Completed in May 2018 Measurement data are reflected in proposed EMR January-June 2018
Recommendations: Kut-01	
Conduct monitoring of environmental quality under Kut-01 project sites (March 2018)  Parameters to be measured: Dust, Carbon monoxide, Nitrogen dioxide, Sulfur dioxide, Noise	Completed in June 2018  Measurement data are reflected in proposed EMR January-June 2018

### 3.6 Consultations and Complaints

#### ***Public Awareness Activities***

- 81.** During the reporting period public awareness activities mainly focused on the 2<sup>nd</sup> phase of KUT-01 water system rehabilitation project and the water meter installation process in apartment buildings. Major public awareness activities for this period in Kutaisi included monitoring of grievances and enquiries submitted through UWSCG hotline, from the effected population both on water system rehabilitation process as well as the water meter installation process at the apartment buildings.
- 82.** In addition, site visits and regular meetings with the effected population were organized when and as necessary to identify existing challenges, increase general awareness on the project progress, safe water consumption and sanitation. Total of 10 public consultation meetings were organized in cooperation with the local municipality with households in apartment buildings. Special information posters were created and distributed at the apartment buildings to raise the awareness of households.

#### ***KUT-01 Kutaisi Water Supply Rehabilitation Project***

- 83.** Eptisa Public Awareness consultants in cooperation with UWSCG's Kutaisi service center and the construction company continued daily monitoring of all the enquiries submitted to the UWSCG hotline concerning KUT-01 project. The cases of damages on the pipeline, water leakage, connection problems, delays in water supply and other similar issues are frequent and cause local population's disruption. Therefore it is very important to monitor submitted grievances to make sure that the enquiries from effected population are answered and taken care in a professional and timely manner.
- 84.** During the reporting period main grievances were submitted due to the waste of water, pipe connection problems, delays in construction process and other issues. Eptisa PA consultants pay big attention to the monitoring process and make sure that the enquiries submitted on UWSCG hotline are communicated to the construction company and are timely resolved.
- 85.** During the reporting period total of 118 enquires were submitted on UWSCG hotline concerning different issues on KUT - 01 project. Out of 118 submitted enquiries 71

were resolved and 47 are in progress. The table below (*Chart 1*) gives detailed information and analysis of the submitted grievances.

**Chart 1**

**January-June Reporting period  
List of submitted grievances/enquiries**

		January – June Reporting Period
<b>1</b>	<b>Problems concerning the water supply</b> <i>(limited or no water supply caused by damages on pipeline, etc.)</i>	26
<b>2</b>	<b>Damages on the pipeline/ water waste/leak</b> caused by the damage	37
<b>3</b>	<b>Connection problems/missed connections</b>	29
<b>4</b>	<b>Water sanitation problems</b>	1
<b>5</b>	<b>Rehabilitation of the road/other damages</b> caused to infrastructure by the water system rehabilitation process	17
<b>6</b>	Other	8
	Total number of submitted grievances	118
	Number of grievances resolved	71
	In progress	30
	Other	17

## ***Consultations and door to door meetings with the effected population***

- 86.** During the reporting period Eptisa PA consultants continued public consultation meetings and door to door campaigns with the effected population in Kutaisi to raise the awareness on project progress, importance of safe water supply, sanitation and other relevant issues. One to one meetings were also organized in cases when grievances were directly submitted by phone or visits to the Eptisa local office by effected population. The submitted enquiries are sent to the construction company for further action. In certain cases Eptisa local PA consultant conducts site visits with local engineers to identify the problem and meet the effected population.
- 87.** During the reporting period door to door campaigns and meetings with population on sites were organized for the effected population of the following streets: Mikelade-Mevele street, Asatiani 2<sup>nd</sup>, Javakhishvili street (#42), Solomon Pirveli street (#8), Tsereteli street (#191), Tsereteli 4<sup>th</sup>, Gaprindashvili and I. Chavchavadze streets.
- 88.** The main challenges identified during the reporting period included:
- Population on Tsereteli 4<sup>th</sup>, Solomon Pirveli Street #8 and Tsereteli Street #191 requested the rehabilitation of the road damaged during the water system rehabilitation process. Eptisa PA consultant and resident engineer visited the sites, met with the local population and got acquainted with the situation. Based on the assessment it was decided to ask the construction company to rehabilitate the damaged road. The rehabilitation is in progress.
  - Population on Javakhishvili Street #42 had water leakage problems during the rain. Eptisa PA consultants met with the effected population and communicated the problem with the construction company. To eliminate the leakage problem it was decided to rehabilitate the road on this particular section with the denser, 6 centimeter asphalt.
  - Population on Mikeladze-Mevele Street #8 complained about the damages caused by the water system rehabilitation process, in particular they requested the rehabilitation of the damaged wall as well as replacement of the road coverage with smaller gravels (instead of existing big stones). Eptisa PA consultant and resident engineer met with the population, observed the site as well as previous photos provided and assessed the situation. Based on the situation analyses it was decided that the construction company SMK will rehabilitate the damaged wall and replace the current road coverage with smaller gravels.
  - Population on Asatiani Street was concerned regarding the water connections from Agmashenebeli Street, which was not part of the rehabilitation process and caused problems as these particular connections were placed on private property. After assessing the situation Eptisa, local municipality and UWSCG Kutaisi office representatives decided to add these connections to the current project and remove them from Aghmashenebeli street after the rehabilitation process is finished.
  - Population on Chavchavadze street #7b, 7v, 7d was not allowing the construction company SMK to start the water supply rehabilitation process as they did not want to damage the existing road. Eptisa PA consultant met with the population, explained to them the main objectives of the project, expected results, also informed them again about the Grievance mechanism. The population was also informed that the road would be fully rehabilitated after the water supply rehabilitation process was finished. After these discussions the population allowed SMK to start the rehabilitation process.
  - Population of the Gaprindashvili Street requested the rehabilitation of the water supply system. As the water supply system on Gaprindashvili Street was rehabilitated in 2010 this street was not included in current project. The households approached UWSCG with the request because as they mentioned current pipes were of poor quality and could not resist the existing water flow/pressure.

Therefore these pipes were constantly damaged and population was not receiving a proper water supply. After thoroughly examining the situation UWSCG Kutaisi office discovered that there were more than 17 damages on existing pipes so it was decided to include Gaprindashvili Street water system rehabilitation in under the current project. Nevertheless the construction works on the street are currently stopped as the population does not allow construction company SMK to cut the rehabilitated road. Several meetings were held with the population to explain that the construction company will rehabilitate the damaged roads as soon as the pipes are replaced. Results of these discussions and implemented actions will be presented in the next EMR July-December 2018.

### **Water meter installation in apartment buildings**

- 89.** During the reporting period main target audience for public awareness activities in apartment buildings was the population where the water meter installation and water connections were in progress.
- 90.** A special poster campaign was implemented in these apartment buildings during the reporting period. The posters are placed in all apartment buildings before the connection works commence so that population is informed about the projects, its objectives, information about the connections, importance of the safe water supply, donor organizations and other. The posters also include detailed information on the UWSCG hot line and Grievance mechanism.

### **Monitoring of grievances submitted through UWSCG hotline**

- 91.** Eptisa PA consultants and resident engineer in cooperation with UWSCG continue the monitoring of Grievances concerning the water meter installation project at the apartment buildings. During the reporting period 467 grievances were submitted from the effected population in apartment buildings where the water meter installation was in progress or already completed. The chart below (Chart 2) gives detailed information on the submitted grievances from the effected population at the apartment buildings.

#### **Chart 2**

**January-June 2018**

#### **List of submitted grievances/enquiries from the population of apartment buildings**

		January – June 2018
1	<b>Problems concerning the water supply</b> ( <i>limited or no water supply</i> )	53
2	<b>Damages on the pipeline/ water waste/leak</b> caused by the damage	336
3	<b>Connection problems/missed connections</b>	73
6	Other	5
	Total number of submitted grievances	467
	Number of grievances resolved	372

In progress	53
Other	42

***Public consultation meetings and one to one meetings***

92. During the reporting period total of 10 public consultation meetings were organized with the population of apartment buildings. The main objective of the public consultation meetings was to raise the awareness of the effected population about the project, expected results, detailed process of project implementation and activities, timeline as well as the grievance mechanism. Also to identify any concerns or challenges caused but the rehabilitation process and find ways how to resolve them.
93. The consultation meetings were attended by the representatives of local self-governance, UWSCG, Construction Company and Eptisa. List of Consultation meetings with relevant data is provided in Annex H.

***Claim submitted to ADB’s Georgia Resident Mission by Mr.Zaza Kheladze, NGO “ASA” on Noise level from Kldiashvili pumping station and other issues related to Kutaisi Water Supply Project***

94. In January 2018 Mr. Zaza Kheladze, NGO “ASA”, submitted complaint to the ADB’s Georgia Resident Mission in Tbilisi. His claims consisted of two parts: general claims regarding the (i) innovations and new technologies which were not used by UWSCG during planning and implementation of water supply project in Kutaisi; (ii) indifferent attitude towards privatization and ignorance of rich water resources of country from Government’s side; and special complaints (iii) Lack of public relations during the project implementation; (iv) insufficient water - "population in Kutaisi does not get water for 24/7 and (v) the noise level in Kldiashvili pumping station which is too noisy.
95. Since Mr.Zaza Kheladze avoided the GRM procedures identified in para 103, 104 and Annex E as he directly appealed to the ADB’s Georgia Resident Mission he was advised to follow the procedures and apply to the Kutaisi Service Center, which has not yet been implemented. Meanwhile, he was explained that new technologies and approaches in the water sector cannot be considered within the framework of one particular project; moreover, it cannot be considered at the stage of the project construction.
96. It was also clarified to him that part of rehabilitation/construction activities for Kutaisi water supply completed under USIIP, Tranche 1 was implemented under REG-01 project, which is already completed, but remaining part for Kutaisi Water Supply is continuing under USIIP, Tranche 3 - KUT-01 sub-project, which means that there can not be 24 hours working regime for Kutaisi water supply system before completion of all construction activities till 2019.
97. As regards to noise from pumping station - this issue have been several times fixed first in Post-Construction Environmental Audit Report with relevant recommendations, as well as in Bi-annual EMRs, according which Contractor "Cobra" under Reg-01/Kutaisi sub-project implemented the first stages of noise reduction work, consisting only of installing noise-absorbing panels in the interior parts of doors and windows.

98. Although the situation has been improved, it do not solve the problem, and further intervention was necessary. Therefore, based on the aforementioned, contractor purchased additional noise-insulating materials, which significantly increased the noise isolation area, and reduced noise level to the national and International standards (55dB daytime and 45 dB night time).

99. With regard to the lack of communication with stakeholders and public awareness campaigns it should be noted that Mr. Zaza Kheladze regularly participated in meetings held by Eptisa, UWSCG and the contractor under the Kut-01 project. Evidence of his presence at these meetings is recorded in photographs, one of which is given below. The list of meetings with the participation of Mr. Zaza Kheladze is given in ANNEX I.

**Photo 2:** Meeting under Kut-01 project



### **Trainings carried out by Supervision Company/Eptisa**

100. On site environmental safeguard trainings were organized for URE-01 and Kut-01 project contractors on a regular basis, during the site visits. Environmental specialists of the above mentioned contractors are instructed to follow safeguard regulations of ADB/SPS 2009 and EMP/SSEMP requirements. The main issues of discussion were the site management and implementation of mitigation measures in accordance with the SSEMP.

### **Grievance redresses mechanism (GRM)**

101. GRM Focal points of contractors were appointed at the sites under Kut-01 and Ure-01 projects and grievance boxes have been installed during the reporting period, January-June 2018.

## PART IV – CONCLUSIONS AND ACTION PLAN FOR THE NEXT PERIOD

### 4.1 Conclusions and recommendations

**102.**As presented in this report, Tranche-3 of this Investment Program is being implemented in compliance with the ADB Safeguards Policy Statement, 2009, National Legislation and overall EARF.

**103.**Necessary instructions have been given to the Contractor by UWSCG and SC to follow the EMP's and SSEMP's requirements for Kut-01, Ure-01 and Ure-02 projects.

**104.**More detailed recommendations are with indication of the entities responsible for their implementation are provided in the table below:

**Table 12:** Recommendations to address Environmental Issues

Environmental issues under KUT-01, Ure-01 and Ure-02 projects	Recommendations
<b>Kutaisi Network</b>	
Safety signs/tapes around of all open trenches should be installed to avoid accident of population	<i>Instruction is given to contractor to improve the situation and sent improved photos to UWSCG and EPTISA.</i>
Special blinking signs or flag men should be provided when passing streets to avoid disturbance of car movements	<i>Improvements will be presented in next EMR July-December 2018</i>
Surplus waste soil should be removed and disposed in a proper place	
Enough and proper wooden/metal walkways/planks across open trenches should be installed	
Environmental Quality Measurement results of PM exceed the HWO guideline standards	<p><i>Following Instructions are given to contractor to improve the situation on sites:</i></p> <ul style="list-style-type: none"> <li>• Cover or damp down by water spray on the excavated mounds of soil to control dust generation;</li> <li>• Damp down unsatisfied /bad condition roads to avoid dust generation while using for transport of waste/material</li> <li>• Use tarpaulins to cover loose material that is transported to and from the site by truck</li> <li>• Control dust generation while unloading the loose material (particularly aggregate and</li> </ul>

Environmental issues under KUT-01, Ure-01 and Ure-02 projects	Recommendations
	<p>sand) at the site by sprinkling water/unloading inside barricaded area</p> <ul style="list-style-type: none"> <li>• Don't allow access in the work area except workers to limit soil disturbance and prevent access by fencing</li> </ul>
<b>Kutaisi Godogani Reservoir</b>	
<p><i>Proper warning and information signs should be arranged at the entrance and perimeter of the site</i></p>	<p><i>Instruction is given to contractor to improve the situation and sent improved photos to UWSCG and EPTISA.</i></p>
<p><i>Safety signs/tapes and trench side barriers around of deep open excavation should be installed from all sides to avoid accidents</i></p>	<p><i>Improvements will be presented in next EMR July-December 2018.</i></p>
<p><i>Proper fuel/oil spill response items (sand, sawdust, special containers) should be available at the site</i></p>	
<p>Environmental Quality Measurement results of PM exceed the HWO guideline standards</p>	<p><i>Following Instructions are given to contractor to improve the situation on sites:</i></p> <ul style="list-style-type: none"> <li>• Cover or damp down by water spray on the excavated mounds of soil to control dust generation;</li> <li>• Apply water prior to levelling or any other earth moving activity to keep the soil moist throughout the process;</li> <li>• Bring the material (aggregate and sand) as and when required;</li> <li>• Ensure speedy completion of work and proper site clearance after completion;</li> <li>• Clean wheels and undercarriage of haul trucks prior to leaving construction site</li> </ul>
<b>Kutaisi Mukhrani Reservoir</b>	
<p>Safety signs/tapes should be installed around open trenches to avoid accidents</p>	<p><i>Instruction is given to contractor to improve the situation and sent improved photos to UWSCG and EPTISA.</i></p>
<p>Site internally should be arranged properly and cleaned regularly</p>	
<p>Safety signs/tapes should be installed around open trenches to avoid accidents</p>	<p><i>Improvements will be presented in next EMR July-December 2018.</i></p>



Environmental issues under KUT-01, Ure-01 and Ure-02 projects	Recommendations
<b>Ure-01 Pumping Station</b>	
Surplus waste soil to be managed properly (fencing, signage, piling standard)	<i>Instruction is given to contractor to remove surplus waste soil that is temporarily located in the Construction area and use for reinstatement purposes for Reservoir #1 under the ure-01 sub-project.</i>
<b>Ure-01 Construction Material Storage Area</b>	
Construction equipment should be in good condition	Instruction is given to contractor to develop CAP and immediately improve the situation.  CAP and corresponding photos will be presented in July-December EMR 2018.
Site fencing should be complete and with visible materials on it	
Construction materials should be segregated precisely and stored properly	
Site internally should be arranged properly (including signage) and cleaned regularly (animals should not be available at the site)	
Site gate should be operation at every entrance or exit with relevant signage	

#### 4.2 Action Plan for the next period

105. Implement Tranche-3 in compliance with the ADB Safeguards Policy Statement, 2009, National Legislation and overall EARF.
106. Conduct monitoring of environmental quality under Kut-01 and Ure-01 projects at each construction site in with particular reference to dust, noise and vibration.
107. Carry out noise measurement at the nearest sensitive receptors and at the construction site by the end of September 2018.
108. The specific plan for measurement is as follows:

**Table 13:** Conduct monitoring of environmental quality under Kut-01 and Ure-01 projects at each site

Parameters	Quarterly measurement
Dust	September 2018
Vibration	September 2018
Carbon monoxide	September 2018
Nitrogen dioxide	September 2018
Sulfur dioxide	September 2018
Noise	September 2018

## ANNEXES:

### ANNEX A: MONITORING DATA

#### Kut-01: Monitoring data, January-June 2018.

##### Kutaisi Water Supply Project

##### Monitoring measurements under project: 43405-023

June 2018

#### 1. Introduction

It is proposed to improve the water supply system in Kutaisi under the Asian Development Bank (ADB) funded Urban Services Improvement Investment Program. This Investment Program, implemented in seven towns, will develop the water and sanitation services, which will improve quality of life and optimize the social and economic development.

A first phase of the Kutaisi sub-project, financed under Tranche I, focuses in water supply measures and implemented in 2013 – 2015. Phase II, financed under Tranche 3, and with a start of implementation in 2014 will complete the rehabilitation and extension of the water supply system.

#### 2. Regulatory Requirements

The environmental quality standards on the territory of Georgia are regulated by Decree No 287N of August 16, 2001 of the Minister of Labor, Health and Social Affairs of Georgia "On the approval of the environmental quality standards" (State Registration Code 470.230.000.11.119.004.920).

The following amendments were made to the above-mentioned decree:

1. Decree No 38/N of February 24, 2003 of the Minister of Labor, Health and Social Affairs of Georgia, SSM III, №16, 06.03.2002, Article 150
2. Decree No.251/N of the Minister of Labor, Health and Social Affairs of Georgia of September 15, 2006–SSMIII, №129, 20.09.2006, Article 1716
3. Decree No.351/N of the Minister of Labor, Health and Social Affairs of Georgia of December 17, 2007–SSMIII, №179, 18.12.2007, Article 1974
4. Decree No.304/N of the Minister of Labor, Health and Social Affairs of Georgia of September 18, 2009–SSMIII, №115, 22.09.2009, Article 1312
5. Decree No.98/N of the Minister of Labor, Health and Social Affairs of Georgia of April 14, 2010–SSMIII, №39, 14.04.2010, Article 622
6. Decree No.350/N of the Minister of Labor, Health and Social Affairs of Georgia of October 25, 2010 -SSMIII, №138, 26.10.2010, Article 2000
7. Decree No.01-24/N of the Minister of Labor, Health and Social Affairs of Georgia of May 17, 2012 – website, 17.05.2012

#### 3. Description of the works to be accomplished

Under the agreement concluded between the Construction Contractor SMK ULUSAL INSAAT Ve TICARET branch of Georgia and "Eco-Spectri" Ltd., the environmental quality analysis was accomplished at different points, in particular on the territory of Kutaisi (Rustaveli, Aslanikashvili, Skhirtladze street and akhlagzrdobis Avenue), where the project construction works are in progress, the environmental quality analysis of the adjacent area was done.

#### 4. Accomplished measurements and results

##### 4.1 Introduction

In Georgia, Kutaisi is one of the four cities where the National Environmental Agency regularly monitors the environmental quality. Consequently, the results of measurements of the National Environmental Agency can be considered as basic for the construction works taking place on the territory of the city of Kutaisi.

The air pollution monitoring in Kutaisi in May 2018 accomplished at the observation point located in Chavchavadze Avenue. The concentrations of the following atmospheric air pollutants were fixed: dust, carbon monoxide, sulphur dioxide, nitrogen dioxide, nitrogen oxide and lead.

The identified maximum single and average monthly concentrations of each polluting ingredient are given in Table 1.

**Table 1. Maximum single and average monthly concentrations fixed in the city of Kutaisi<sup>1</sup>**

Point of observation	Dust		Nitrogen dioxide		Sulphur dioxide		Carbon monoxide		Nitrogen oxide	
	maximum single concentration, mg/m <sup>3</sup>	Average monthly concentration, mg/m <sup>3</sup>	maximum single concentration, mg/m <sup>3</sup>	Average monthly concentration, mg/m <sup>3</sup>	maximum single concentration, mg/m <sup>3</sup>	Average monthly concentration, mg/m <sup>3</sup>	maximum single concentration, mg/m <sup>3</sup>	Average monthly concentration, mg/m <sup>3</sup>	maximum single concentration, mg/m <sup>3</sup>	Average monthly concentration, mg/m <sup>3</sup>
<b>Chavchavadze Avenue</b>	0.037	0.015	0.038	0.098	0.001	0.002	4.0	3.3	0.041	0.06

##### 4.2 Background radiation

The background radiation on the territory of the city of Kutaisi is permanently measured by the National environmental Agency. As the results of the current year suggest, the background radiation on the territory of the city of Kutaisi varies between 10-15 mR/h constituting thus being within the admissible limit of 30 mR/h.

The measurements accomplished in the project area yielded virtually the same result: the level in various sites was varied from 7 mR/h to 13 mR/h (see annex 1).

##### 4.3 Noise and Vibration

The Construction Contractor carried out the construction works in Tsereteli, Agmashenebeli, Gansaxurdia and Miqeladze-Mevele streets and at reservoir. The trenches had been excavating at sites and the trenches were filled in some of them..

In all cases, the noise level in the immediate vicinity of the techniques varies within 60-80 dB. However, the noise level sharply reduced after 20-25 m and was within 55-70 dB in the vicinity of the nearest buildings and premises.

As a rule, noise caused by moving equipment's is reduced at some distance. Such reduction has logarithmic properties. In case of noise caused by construction activities, noise spread pattern from

<sup>1</sup>Source: <http://nea.gov.ge/ge/service/garemos-dabindzureba/7/biuleteni/>

the noise point is used, that can be determined as: Noise level1-Noise level 2=20 log r2/r1, meaning that by doubling of distance noise is reduced by 6 dBA.

**Table 26: Noise levels**

Distance from noise source, m	Calculation level of the noise Average value - dBa	Calculation level of the noise Maximum value - dBa
10	80	90
20	74	84
40	68	78
80	62	72
160	56	66
320	50	60

#### 4.4 Air quality values

The quality indicators of the following components measured in the project area: dust, CO, NO<sub>2</sub> and SO<sub>2</sub>.

The results of the accomplished quality measurements given in Annex 1.

Annex 1: The results of the accomplished quality measurements

Place of measurement	Dust Mg/m <sup>3</sup>		CO Mg/m <sup>3</sup>		NO <sub>2</sub> Mg/m <sup>3</sup>		SO <sub>2</sub> Mg/m <sup>3</sup>		Noise db		Radiation mR/h		Vibro- acceleration m/sek	
	standard	result	standard	result	standard	result	standard	result	standard	result	standard	result	standard	result
At Reservoir 42°14'06.07" N 42°42'25.89" E	0.5	PM <sub>10</sub> - 0.04 PM <sub>2.5</sub> - 0.15	5.0	2.1	0.2	0.01	0.5	≥ 0.1	70	47.6	30	10	4.0	2.4
Rustaveli Ave 42°15'59.13" N 42°41'23.80" E		PM <sub>10</sub> - 0.06 PM <sub>2.5</sub> - 0.09		2.4		0.02		≥ 0.1		63.0		11		3.0
Aslanikashvili street 42°16'50.79" N 42°42'17.82" E		PM <sub>10</sub> - 0.07 PM <sub>2.5</sub> - 0.17		2.2		0.02		≥ 0.1		70.1		14		0.1
Akhalgazrdobis Ave 42°14'31.40" N 42°42'41.33" E		PM <sub>10</sub> - 0.23 PM <sub>2.5</sub> - 0.17		2.6		0.02		≥ 0.1		64.4		12		4.3
Shkirtladzire street 42°16'89.37" N 42°41'41.55" E		PM <sub>10</sub> - 0.19 PM <sub>2.5</sub> - 0.28		3.1		0.04		≥ 0.1		69.0		6		2.7

Zureb Revazishvili  
Environmental Unit  
Ltd "Eco-Spectri"




Annex 2: Photos

Photo 1: Aslanikashvili street



Photo 2: Skhirtladze street



Photo 3: Rustaveli avenue



Photo 4: Reservoir



Photo 5: Skhirtladze street



Photo 6: Skhirtladze street



**Concentration of harmful substances in atmospheric  
Ltd "Feri" 12-14 June 2018**

Samplin place coordinates	Sample N	Noise DB	Concentration mg/m <sup>3</sup>					
			Saturated hydrocarbons	Carbon oxide CO	Nitrogen dioxide NO <sub>2</sub>	Dust	Sulfur dioxide SO <sub>2</sub>	Hydrogen sulfide H <sub>2</sub> S
Teyermagala X 0731266 Y 4649719	1	40,2	0	0,25	0,001	0,001	<0,1	<0,1
	2	40,8	0	0,30	0,001	0,001	<0,1	<0,1
	3	40,3	0	0,27	0,001	0,003	<0,1	<0,1
	4	40,5	0	0,32	0,001	0,002	<0,1	<0,1
Stelkvenili X0729754 Y4644722	1	50,6	<1	1,15	0,003	0,005	<0,1	<0,1
	2	51,4	<1	1,28	0,002	0,007	<0,1	<0,1
	3	50,8	<1	1,38	0,003	0,006	<0,1	<0,1
	4	51,9	<1	1,52	0,002	0,008	<0,1	<0,1
Pumping station X0730383 Y4649261	1	42,1	0	0,16	0,001	0,004	<0,1	<0,1
	2	43,0	<1	0,81	0,008	0,017	<0,1	<0,1
	3	43,3	<1	0,62	0,003	0,018	<0,1	<0,1
	4	42,2	0	0,31	0,001	0,002	<0,1	<0,1
Natanebi X 0733131 Y 4643222	1	40,0	0	0,17	<0,001	0,011	<0,1	<0,1
	2	42,3	<1	0,20	0,007	0,010	<0,1	<0,1
X07235311 Y4643927	3	41,7	<1	0,22	0,006	0,014	<0,1	<0,1
	4	40,2	0	0,17	<0,001	0,019	<0,1	<0,1

**Executors:**  
Main specialist  
Main specialist  
Specialist

**Agreed:**  
Head Environmental Pollution  
Monitoring Department



*[Signature]*  
O. Kenia  
S. Katsava  
G. Morgoshian

M. Arabidze

ინფორმაცია  
ატმოსფერულ ჰაერში დამაზიანებელ ინგრედიენტთა კონცენტრაციის შესახებ  
შპს „ჯერი“ 12-13 ივნისი 2018წ.

სიჩქარის აღების ადგილი, კოორდინატები	სიჩქარის აღების ადგილის ნომერი	სიჩქარის აღების დღე	კონცენტრაცია მკგ/მ <sup>3</sup>					ფორმალდეჰიდი
			ნაყვრი ნახშირწყალბადები	საშიშრადის ოქსიდი CO	აზოტის დიოქსიდი NO <sub>2</sub>	მტვერი	სოკოების დიოქსიდი SO <sub>2</sub>	
წერძნაღა რეზერვუარი X 0731266 Y 4649719	1	40,2	0	0,25	0,001	0,001	<0,1	<0,1
	2	40,8	0	0,30	0,001	0,001	<0,1	<0,1
	3	40,3	0	0,27	0,001	0,003	<0,1	<0,1
	4	40,5	0	0,32	0,001	0,002	<0,1	<0,1
შეკვილი X0729754 Y4644722	1	50,6	<1	1,15	0,003	0,005	<0,1	<0,1
	2	51,4	<1	1,28	0,002	0,007	<0,1	<0,1
X0729551 Y4646280	3	50,8	<1	1,38	0,003	0,006	<0,1	<0,1
	4	51,9	<1	1,52	0,002	0,008	<0,1	<0,1
სანახევარი X0730383 Y4649261	1	42,1	0	0,16	0,001	0,004	<0,1	<0,1
	2	43,0	<1	0,81	0,008	0,017	<0,1	<0,1
	3	43,3	<1	0,62	0,003	0,018	<0,1	<0,1
	4	42,2	0	0,31	0,001	0,002	<0,1	<0,1
ნატანები X 0738131 Y 4643222	1	40,0	0	0,17	<0,001	0,011	<0,1	<0,1
	2	42,3	<1	0,20	0,007	0,010	<0,1	<0,1
X07235311 Y4648927	3	41,7	<1	0,22	0,006	0,014	<0,1	<0,1
	4	40,2	0	0,17	<0,001	0,019	<0,1	<0,1

შემაჯავრობებელი:

ზოგადი სპეციალისტი

ზოგადი სპეციალისტი

სპეციალისტი

შეთანხმებულია:

გარემოს დამაზიანებელის მონიტორინგის დეპარტამენტის  
ფორსი



ოცენია  
ხ.ხაჯაძე  
გამორეზონა

მ. არაბიძე

## ANNEX B: PROJECT PHOTOS

### Site Visit

#### Photos: Ure-02







**Ure-01**

**Pumping Station**



**Reservoir#1**



### **Fencing Works on Well Fileds**



### **Kut-01: Mukhnari Reservoir**



**Kut-01: Mukhrani Reservoir – ADB’s Mission 28-30 January 2018**



**Kut-01: Godogani Reservoir**



**Kut-01: Reinstatement of Network**



**Kut-01: Network - Instalation of Hydrants:**



## ANNEX C: NON-COMPLIANCE NOTICES

### NON-COMPLIANCE NOTICE – KUT-01



#### NETWORK

- Construction activities information signs should be installed at each construction segment
- Safety signs/tapes around of all open trenches should be installed to avoid accident of population
- Special blinking signs or flag men should be provided when passing streets to avoid disturbance of car movements
- Surplus waste soil should be removed and disposed in a proper place
- Construction materials should be brought when needed to avoid its long time disposal in the streets and disturbance of residents and businesses
- Enough and proper wooden/metal walkways/planks across open trenches should be installed

**Non-Compliance Notice**

Project: USIIP	<b>Non-compliance Notice KUTAISI</b>
Contract No: KUT-01	
Contractor: SMK	
Reference: Kutaisi – Godogani Reservoir, Network	

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

**NON-COMPLIANCE IN KUTAISI**

**Godogani Reservoir**

- Site should be properly fenced from all sides and equipped with lockable gate
- Proper warning and information signs should be arranged at the entrance and perimeter of the site
- Safety signs/tapes and trench side barriers around of deep open excavation should be installed from all sides to avoid accidents
- Construction territory should be lighted adequately
- Trees at the construction site and nearby deep excavation zone should be protect to avoid its damage
- Safety tapes and fencing around concrete washing pit and proper sign should be installed
- Safety officer should be permanently available at the construction site
- Oils or similar liquid containers should be stored properly at dedicated place
- Proper fuel/oil spill response items (sand, sawdust, special containers) should be available at the site
- The access road and internal roads should be arranged properly
- Waste should be placed only at the proper waste container
- Parking area should be better organized, transport should be parked only at the Parking area
- Workers always should use complete PPE
- Site internally should be arranged properly and cleaned regularly

**Photos of Godogani Reservoir**





**NETWORK**

- Construction activities information signs should be installed at each construction segment
- Safety signs/tapes around of all open trenches should be installed to avoid accident of population
- Surplus waste soil should be removed and disposed in a proper place on time
- Top soil before starting of excavation works should be removed and stored separately with signage
- Construction materials should be brought when needed to avoid its long time disposal in the streets and disturbance of residents and businesses
- Resident houses nearby areas should be clean from construction materials to avoid disturbance of residents and

- Resident houses nearby areas should be clean from construction materials to avoid disturbance of residents and businesses
- All transmission line construction segments should be cleaned/well organized on regular bases
- Workers always should use complete PPE
- Refilling/compaction and reinstatement process should bring site at the same or better condition as it was before construction

**Photos of Kutaisi Network**



All these conditions have to be remedied within four days (by the 31 March 2018) by the prime Contractor (SMK).

<b>Date of site visits 22.03-23.03.2018</b>	
Irakli Legashvili	
EPTISA - Environment	



**Non-Compliance Notice**

<b>Project: USIP</b>	<b>Non-compliance Notice KUTAISI</b>
<b>Contract No: KUT-01</b>	
<b>Contractor: SMK</b>	
<b>Reference: Kutaisi – Godogani Reservoir, Network</b>	

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

**NON-COMPLIANCE IN KUTAISI**

**Godogani Reservoir**

- Construction site should be properly fenced from all sides and equipped with lockable gate
- Construction territory should be lighted adequately
- Proper warning and information signs should be arranged at the entrance and perimeter of the site
- High visible safety signs/tapes and trench side barriers around of deep open excavation should be installed from all sides to avoid accidents
- Special equipment during working at heights should be used
- Safety rules during electric cable use should be respected, including the way of its installation.
- Trees at the construction site and nearby deep excavation zone should be protect to avoid its damage
- Proper fencing around concrete washing pit with relevant information/warning sign should be installed
- Safety officer should be permanently visiting/monitoring construction site
- Proper fuel/oil spill response items (sand, sawdust, special containers) should be available at the site
- Spots of oil spills should be remediated immediately
- Containers with fuel/lubricant should be managed properly (stored at the proper organised place with concrete floor and roofing) to avoid leakage and ground contamination
- Equipment & vehicles used for construction activities should be in good condition (no leakage)
- All construction materials should be properly segregated and stored adequately
- The access road and internal roads should be arranged properly
- Parking area should be better organized, transport should be parked only at the Parking area
- Workers always should use complete PPE
- Site internally should be arranged properly and cleaned regularly

**Photos of Godogani Reservoir**



businesses

- Construction segments should be watered regularly to avoid dust generation
- Special blinking signs or flag men should be provided when passing streets to avoid disturbance of car movements
- All transmission line construction segments should be cleaned/well organized on regular bases
- Workers always should use complete PPE
- Refilling/compaction and reinstatement process should bring site at the same or better condition as it was before construction

**Photos of Kutaisi Network**



All these conditions have to be remedied within five days (by the 27 May 2018) by the prime Contractor (SMK).

<b>Date of site visits 17.05-18.05.2018</b>	
Irakli Legashvili	
EPTISA - Environment	

**Non-Compliance Notice**

Project: USIIP	<b>Non-compliance Notice UREKI</b>
Contract No: URE-01	
Contractor: PERI	
Reference: <b>UREKI - UREKI PUMPING STATION</b>	

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

**NON-COMPLIANCE IN UREKI**

**PAMPING STATION**

- Entrance door and fencing of the construction site should be in better condition and complete
- Piles of soil at the construction territory should be managed properly
- Top soil should be separated from surplus waste soil and managed properly (fencing, signage, piling standard)
- Safety tapes around open trenches should be installed
- The site access road and internal roads should be better arranged (graveling)
- All workers should be equipped with complete PPE
- Site internally should be arranged properly and cleaned regularly





All these conditions have to be remedied within four days (by the 31 March 2018) by the prime Contractor (Peri).

Date of site visits: 22.03-23.03.2018

Irakli Legashvili  
EPTISA - Environment

### Non-Compliance Notice

<b>Project: USIIP</b>	<b>Non-compliance Notice UREKI</b>
<b>Contract No: URE-01</b>	
<b>Contractor: PERI</b>	
<b>Reference: UREKI – Camp</b>	

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

**NON-COMPLIANCE IN UREKI**

- Construction equipment should be in good condition (non leakage)
- Proper fuel/oil spill response items (sand, sawdust, special containers) should be available at the site
- Construction waste (wooden, metal, plastic, etc.) should be removed from construction area completely and timely
- Site gate should be operation at every entrance or exit with relevant signage
- Site fencing should be complete and with visible materials on it
- Oil spillage traces should not be available at the site
- Waste should be placed at the proper standard waste containers with labeling
- Containers of lubricants should be managed properly (concrete flooring and relevant roofing)
- Construction materials should be segregated precisely and stored properly
- Site internally should be arranged properly (including signage) and cleaned regularly (animals should not be available at the site)



All these conditions have to be remedied within ten days (by the 4 May 2018) by the prime Contractor (Peri).	
<b>Date of site visits: 17.04-18.04.2018</b>	
Irakli Legashvili EPTISA – Environment Kate Chomakhidze Environmental Specialist – USIIP UWSCG Maka Goderdzishvili Head of Environmental Department - UWSCG	

**ANNEX D: IMPLEMENTATION REPORT ON THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA) /INITIAL ENVIRONMENTAL EXAMINATION (IEE) MITIGATION REQUIREMENTS:**

Reference	Requirement	Action to date	Action required/comment
<b>Ure-01: Pumping station</b>			
	Entrance door and fencing of the construction site should be in better condition and complete	Completed	Contractor to ensure final removal and disposal of surpluses waste soil for the reinstatement purposes in the territory of reservoir #1.
	Site internally should be arranged properly and cleaned regularly	Completed	
	All workers should be equipped with complete PPE	Completed	
	Piles of soil at the construction territory should be managed properly	Completed	
	Top soil should be separated from surplus waste soil and managed properly (fencing, signage, piling standard)	Partially Completed	
	Safety tapes around open trenches should be installed	Completed	
	The site access road and internal roads should be better arranged (graveling)	Completed	
<b>Ure-01</b>			

Reference	Requirement	Action to date	Action required/comment
<b>Construction Materials Storage Area</b>			
	Construction materials should be segregated precisely and stored properly	Partially Completed	Contractor to developed Corrective Action Plan and improved the situation within the proposed deadlines, site improvements with relevant photos will be presented in EMR July-December 2018.
	Site internally should be arranged properly (including signage) and cleaned regularly (animals should not be available at the site)	Partially Completed	
	Site gate should be operation at every entrance or exit with relevant signage	Partially Completed	
	Waste should be placed at the proper standard waste containers with labeling	Partially Completed	
	Containers of lubricants should be managed properly (concrete flooring and relevant roofing)	Partially Completed	
	Construction equipment should be in good condition	Partially Completed	
	Site fencing should be complete and with visible materials on it	Partially completed	
	Construction materials should be segregated precisely and stored properly	Partially completed	
	Site internally should be arranged properly (including signage) and cleaned regularly (animals should not be available at the site)	Partially completed	
<b>Kut-01: Network</b>			
	Construction activities information signs should be installed at each construction segment	Completed	
	Safety signs/tapes around of all open trenches should be installed to avoid accident of population	Partially Completed	

Reference	Requirement	Action to date	Action required/comment
	Special blinking signs or flag men should be provided when passing streets to avoid disturbance of car movements	Not Completed	Contractor is instructed to immediately provide special blinking signs and flag man to avoid disturbance on streets by car movement.
	Surplus waste soil should be removed and disposed in a proper place	Partially Completed	Contractor is instructed to improve the situation and provide relevant photos to UWSCG.
	Construction materials should be brought when needed to avoid its long time disposal in the streets and disturbance of residents and businesses	Completed	
	Enough and proper wooden/metal walkways/planks across open trenches should be installed	Partially Completed	Contractor is instructed to improve standards while working on trenches and follow requirements of SSEMP/EMR.
	Resident houses nearby areas should be clean from construction materials to avoid disturbance of residents and businesses	Completed	
	All transmission line construction segments should be cleaned/well organized on regular bases	Completed	
	Workers always should use complete PPE	Completed	
	Refilling/compaction and reinstatement process should bring site at the same or better condition as it was before construction	Completed	
<b>Kut-01: Mukhrani Reservoir</b>			
	Construction waste should be removed timely and completely	Completed	
	Safety signs/tapes should be installed around open trenches	Partially Completed	Contractor is instructed to improve standards while working on trenches and



Reference	Requirement	Action to date	Action required/comment
	to avoid accidents		follow requirements of SSEMP/EMR.
	Waste should be placed only at the proper waste container	Completed	
	Workers always should use complete PPE	Completed	
	Site internally should be arranged properly and cleaned regularly	Partially Completed	Contractor is instructed to improve the situation and follow requirements of SSEMP/EMR.
<b>Kut-01: Godogani Reservoir</b>			
	Site should be properly fenced from all sides and equipped with lockable gate	Partially Completed	Contractor is instructed to improve the situation and follow requirements of SSEMP/EMR.
	Proper warning and information signs should be arranged at the entrance and perimeter of the site	Partially Completed	Contractor is instructed to improve the situation and follow requirements of SSEMP/EMR.
	Safety signs/tapes and trench side barriers around of deep open excavation should be installed from all sides to avoid accidents	Not Completed	Contractor is instructed to immediately improve the situation and install safety signs from all sides of open excavation to avoid accident and to send improved photos to UWSCG.  Improved photos of sites will be provided in EMR July-December 2018.
	Construction territory should be lighted adequately	Completed	
	Trees at the construction site and nearby deep excavation zone should be protect to avoid its damage	Completed	
	Safety tapes and fencing around concrete washing pit and proper sign should be installed	Completed	
	Safety officer should be permanently available	Partially Completed	Contractor is instructed to improve the situation and

Reference	Requirement	Action to date	Action required/comment
	at the construction site		follow requirements of SSEMP/EMR.
	Oils or similar liquid containers should be stored properly at dedicated place	Partially Completed	Contractor is instructed to improve the situation and follow requirements of SSEMP/EMR.
	Proper fuel/oil spill response items (sand, sawdust, special containers) should be available at the site	Partially Completed	Contractor is instructed to improve the situation and follow requirements of SSEMP/EMR.

## ANNEX E: DETAILED PROCEDURES FOR GRM SYSTEM IMPLEMENTATION

### Grievance redresses mechanism (GRM)

- 109.** Any affected person can apply at a UWSCG local service centre through different ways, either by going to the service centre, sending a letter to the service centre, or calling a hotline. The operators of the service centre can respond by going directly to the affected person if they are disabled to get the written grievance from them. As it was mentioned above the GRM in Kutaisi has been operational since April 2014, and the system operates in three stages.
- 110.** During the first stage, complaints are discussed within two weeks of being received by the local service centre of UWSCG (e.g. Kutaisi office), based on the verbal or written complaint. In the first stage of grievance review and resolution, an authorized representative of the local service centre is responsible for ensuring the registration of the claim and its further processing. He/she engages in the grievance review and resolution process representatives (managers and environmental specialists) of Construction and Supervision Companies, and the representatives of UWSCG central office as required. At the local service centre, the affected person is provided with a queue number and then registers the grievance at the service desk.
- 111.** The service centre operators, who are trained<sup>3</sup> in USIIP/Reg-01 project, register all relevant grievances with support of an online task management system, which tracks information on the grievance review process and the responsible person. Moreover, the operators fill the ADB complaints log with the registered grievance that coincides with local internal forms. This electronic intranet system<sup>4</sup> allows the UWSCG Tbilisi Office to immediately see claims. Therefore, claims submitted to any regional service centre can be monitored by the Head of the Investment Projects Management Office (IPMO), as well as the Head of the Environmental and Resettlement Division, Maka Goderdzishvili.
- 112.** When a grievance is solved positively in the first stage, the grievance is closed through an Agreement Protocol, which is reflected in the eDocument – Task Management System.
- 113.** The grievance enters a second stage if it is not solved. In that case, the authorized representative of the local service centre will help the claimant prepare a package of grievance application documents for official submission to the Grievance Redress Committee (GRC). The package contains the following information:
- Name, ID, address and contact details of the claimant
  - Description of the essence of the complaint
  - Supporting documents and evidences (photos, maps, drawings/sketches, conclusion of experts or any other documents confirming the claim)
  - Brief description of the actions proposed for the grievance resolution at the first stage and the reasons why these actions were denied
  - Minutes of meetings conducted at the first stage

---

<sup>3</sup> UWSCG and Supervision Consultant (Eptisa) conducted trainings for service center operators covering general procedures of GRM functioning in order to ensure proper coordination of different departments.

<sup>4</sup>The **eDocument - Task Management System** was developed by LEPL Financial-Analytical Service of the Ministry of Finance of Georgia. It is an innovative electronic document and task management mechanism for electronically processing of documents. Used by almost all the major budgetary organizations in Georgia, the eDocumentservice offers an opportunity to manage, find, and track documents for information-intensive organizations.

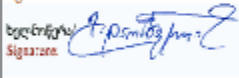

- 114.** The GRC should make a decision within two weeks after the registration of the grievance. The GRC is staffed as follows: (i) Representative of self-government – the head of committee; (ii) Director/ Manager of UWSCG service centre; (iii) Investments Project Management Division representative of the company; (iv) Representative of local authoritative NGO (according to the claim reference); (v) Stakeholders' female representative;(vi) Stakeholders' informal representative; and (vii) Heads of local municipalities.
- 115.** The GRC will review the package of grievance documents, set a date for a meeting with the claimant, discuss the claim at the meeting, and set up a plan for further actions (actions, responsible persons, schedule etc.). Upon the resolution of the case, the GRC will prepare a brief resume and protocol and the protocol signed by complainant and all parties will be registered in a grievance log.
- 116.** There is a third stage in case there is a failure to resolve the grievance. In this case, GRC will help the claimant to prepare the documents for submission to the Rayon (municipal) court.


# ANNEX F: WEEKLY ENVIRONMENTAL MONITORING REPORTS

## Kut-01

ყოველკვირეული გარემოსდაცვითი მონიტორინგი  
Weekly Environmental Monitoring

Name of the Contractor and project number/lot შენიშნული კონტრაქტორის სახელი და პროექტის/ლოტის ნომერი	SMK Ulusal Insaat Ve Ticaret A.S. (Turkey), Construction and Rehabilitation of Water Supply System in Kutaisi / Phase 2 (KUT-01)
კონტრაქტის #: Contract #:	Contract No: P43405-ICB-KUT-01
Description and Location of the Site სამშენებლო საიტის ადგილმდებარეობის აღწერა	Mukhnari/მუხნარი
Implementing Agency განმახორციელებელი სააგენტო	შპს „საქართველოს გაერთიანებული წყაროსწარმოების კომპანია“ "United Water Supply Company of Georgia", LLC
Date of Visit (Year/Month/Day) ვიზიტის დრო და თარიღი	09 ივლისი/July – 16 ივლისი/July
Supervisor's Identity (name, last name, contact information and signature) საზედამუშევრო კომპანიის წარმომადგენლის სახელი, გვარი, საკონტაქტო ინფორმაცია და ხელმოწერა	კონტრაქტორი/Contractor: Signature and stamp/ხელმოწერა და ზეგედი
Current Stage of Civil Works სამშენებლო სამუშაოების მიმდინარე სტატუსი	ირაკლი დეგბევილი მომდინარე On going
Weather Conditions ამინდის პირობები	Sunny/შხიანი

საიტის უსაფრთხოება/ზეგარემოს დაცვა/ზე მასუბისმცველი პირი (კონტრაქტორი) Staff responsible for environment/safety at the site (contractor)	სახელი: მამუკა დარახვილიძე Name: Mamuka Darakhvelidze	ხელმოწერა/ Signature:  ხელმოწერა/ Signature
შენიშნულობის ინსპექტორი (ზედამუშევრო) Construction site inspector (supervisor)	სახელი: ნოდარ მჭედლიშვილი Name: Nodar Mchedlishvili	ხელმოწერა/ Signature:  ხელმოწერა/ Signature

გარემოს დაცვის სპეციალისტი (კონტრაქტორი) Environmental Specialist (contractor)	სახელი: თამაზ კუთათელაძე Name: Tamta Kutateladze	ხელმოწერა/ Signature:  ხელმოწერა/ Signature
---	---	--

N	Documents and Facts to be Examined შესამოწმებელი დოკუმენტები და ფაქტები	კი/yes	არა/no	ნაწილად/Partially	არ ვიცი/N.A	შენიშვნა/ Comment
I	<b>EMPs/SSEMPs, Protocols and Reports</b>					
1.1	Contractor's Site-specific Environmental Management Plan (SSEMP) is prepared, reviewed and approved by PIU prior to contractor commencing the works. შპს/შენიშნული და დამტკიცებულია საიტ-სპეციფიკური გარემოსდაცვითი მართვის გეგმა.	✓				Construction of Water Supply System in Kutaisi - phase II
1.2	Construction contractor has National Environmental Specialist in staff. შენიშნულ კონტრაქტორს დადებული აქვს ხელშეკრულება ადგილობრივ გარემოსდაცვითი საკითხების მართვის სპეციალისტთან.	✓				
1.3	Construction contractor has International Environmental Specialist in staff. შენიშნულ კონტრაქტორს დადებული აქვს ხელშეკრულება საერთაშორისო გარემოსდაცვითი საკითხების მართვის სპეციალისტთან.	✓				
1.4	Monthly environmental monitoring reports are prepared by the Contractor and submitted to the Supervision Consultant მთხავეულები გარემოსდაცვითი მართვის გეგმის განხორციელების ყოველთვიური ანგარიშები კონტრაქტორის მიერ და წარდგენილია კონსულტანტისათვის.	✓				
1.5	Emergency Response Plan is prepared and approved. შპს/შენიშნული და მიღებულია ადგილობრივი საუბრაობის რეაგირების გეგმა.	✓				
1.6	Health and Safety Management Plan is prepared and approved. შპს/შენიშნული და მიღებულია ჯანდაცვისა და უსაფრთხოების მართვის გეგმა და ჯანდაცვისა და უსაფრთხოების მართვის სისტემის მუშაობის შესახებ.	✓				
1.7	Complaints log exists on construction site. საიტის უსაფრთხოების არსებობს სამშენებლო საიტზე.	✓				
1.8	Site inspection non-compliance notices issued and corrective action requests implemented.	✓				

მუშაპროექტების შეტყობინებების მიწოდება და წარდგენა კონტრაქტორისთვის და საკონტრაქტო ვალდებულებების განხორციელება.					
1.9 Training/Capacity building activities undertaken as per EMP requirements and records kept of trainings. გაფორმებული და ხელმოწერილია მუშაპროექტის ტრენინგი ს ოქმი განმარტების და უსაფრთხოების საკითხებზე. ტრენინგის ანგარიშები მიწოდებულია და ინახება საიტის კვანძზე.	✓				

**2 Permits, Licenses and Contracts**

2.1 The Contractor has a permit or relevant contract from the Municipality for final disposal of construction waste/კონტრაქტორს მიღებული აქვს საშუალებლობა ნარჩენების საბოლოო განთავსების წებარაფა ამ შესაბამისი კონტრაქტი ადეკვატურად ორგანიზებული.	✓				
2.2 The Contractor has a permit for final disposal of municipal waste. კონტრაქტორს მიღებული აქვს საყოველთაო ნარჩენების საბოლოო განთავსების წებარაფა.	✓				
2.3 The Contractor has executed the contract with the licensed organization on the hand over and disposal of hazardous waste. კონტრაქტორს გაფორმებული აქვს საბოლოო ნარჩენების გადაცემის და გატანის ხელშეკრულება დიპლომირებულ ორგანიზაციასთან.	✓				
2.4 The Contractor has a license for tree felling/კონტრაქტორს გააჩნია დოკუმენტის ქრობის ლიცენზია.	✓				

**3 Performance of civil works**

3.1 საშუალებო ტერიტორიის სრულად შემოღობვა Adequate fencing of construction area from all sides	✓				
3.2 საეკოლოგიური შესაცვლელი კარის მოწყობა, სტანდარტული განაწესების დამონტაჟება და საინფორმაციო ნიშნების აღჭურვა Arrangement of lockable gate with standard warning and information signs	✓				
3.3 საშუალებო ტერიტორიაზე და პერიმეტრზე სტანდარტული განაწესების დამონტაჟება და საინფორმაციო ნიშნების განთავსება Placement of standard warning and information signs at the perimeter and inside of construction area	✓				
3.4 დიდი დატვირთვით მონივრული და ქუჩებზე უსაფრთხოების ღონისძიებების, ნარჩენების და გამაფრთხილებელი ნიშნების განთავსება Installation of safety signs/tapes and trench side barriers around of open trenches				✓	
3.5 1,5 მეტრზე მეტი სიღრმის ტრანშეებში კედლების გამაგრება				✓	

3.6 დასახლებულ ადგილებში დიდი დატვირთვით მონივრული დროებითი გადასაფარებლების მოწყობა Installation of proper temporary wooden/metal walkways/planks across open trenches in settlement areas				✓	
3.7 საშუალებო ტერიტორიაზე, საბუნების რეზონის არსებული ხეების შემოწვევა (დაზიანების თავიდან აცილების მიზნით) Protect all trees nearby construction zone to avoid its damage	✓				
3.8 ტენკეტის დროს, ნიადაგის ნაყოფიერი (დაახლოებით 20-30 სმ სიღრმის) ფენის მოხსნა და განაღებულად გრძელად შენახვა Removal of top soil (about 30 cm depth) and separately storing in appropriate place	✓				
3.9 საშუალებო ნარჩენების და ჭარბი ნარჩენი გრუნტის დროული გატანა/განთავსება Timely removal/disposal of construction waste and surplus waste soil	✓				
3.10 საშუალებო ტერიტორიის დამის საათებში განათება Provide adequate lighting of construction territory	✓				
3.11 საშუალებო ტერიტორიის შესაბამისად მოწყობა შესაღობის და მოწყობილობების და დამაფარების ორგანიზებულია განთავსება (საქიროებიდან გამოშვებისა) Proper arrangement of construction site and segregation/storing of construction materials/equipment. (bring the material when required)	✓				
3.12 საშუალებო ტერიტორიაზე საწვების და საბოხი მასალების დიდების შედგენის საღებავი/დაცვა ნარჩენების (ტენკა, ნარჩენი, მცირე ზომის აფხი და სხვა) ხელმისაწვდომობა Availability of proper fuel/oil spill response items (sand, sawdust, special containers) at the construction site	✓				
3.13 საწვების და საბოხი მასალების კონტეინერების განთავსება მხოლოდ სპეციალურ გადასურულ ადგილებში Allocation of fuel and lubricants containers at the special dedicated place (with roofing and concrete flooring)	✓				
3.14 საშუალებო ტერიტორიაზე სავადგებოფრებო ნარჩენებისთვის თვისებრივადი კონტეინერის განთავსება და შესაბამისი წარწერებით აღჭურვა (მაგ. "HOUSEHOLD WASTE") Placement of proper Household Waste container at the special dedicated place with relevant indication signs (for example "Household Waste")	✓				
3.15 საშუალებო ტერიტორიაზე საბოლოო ნარჩენებისთვის თვისებრივადი კონტეინერის განთავსება და შესაბამისი წარწერებით აღჭურვა (მაგ. "HAZARDOUS WASTE") Placement of proper Hazardous Waste container at the	✓				

	special dedicated places with relevant indication signs (for example "Hazardous Waste")					
3.16	სამშენებლო ტერიტორიაზე ან მის გარეთ ტრანსპორტირების პარკირების ადეკვატური მოწყობა და სიმახვი აღკვეთა (მაგ. P) Arrangement of proper Parking area at the adequate place inside/outside of construction territory with relevant sign (for example P)	✓				
3.17	სამშენებლო მასალების და ნარჩენების ტრანსპორტირების დროს ავტოტრანსპორტის სპეციალური საფარი (გრუნტქარი, ტექსტილსაფარი) აღკვეთა Use tarpaulins cover during materials transportation		✓			
3.18	საჭიროებისას გამოვიყენებო მტკიცის წარმოების პრევენცია (Dust generation prevention activities (when needed))	✓				
3.19	მუშების და ინჟინერ-ტექნიკური პერსონალის მიერ ინდივიდუალური დაცვის საშუალებების (მაგნეტი, ვილეთი, სელააიშანი, ჩუქხები, დამცვეი სარდალი, და სხვა) სრულად გამოყენება Ensure that all workers are provided with and use appropriate Personal Protective Equipment - helmets, hand gloves, boots, masks, safety belts	✓				
3.20	სიმაღლეზე მუშაობის დროს სპეციალური დამცვეი აღკვეთილების გამოყენება Use of special safety equipment during working at heights	✓				
3.21	სამშენებლო ტერიტორიის მუდმივად დალაგება და დასუფთავება Regularly cleaning of construction territory	✓				
<b>4 Monitoring Measurements</b>						
4.1	Monitoring measurement data (air, water, soil, erosion, noise, dust, vibration, etc). ნელოს, ჰერის, ვიზუაციის, ვიბრაციის, ხილვის, მტკიცის და წიდავის მონიტორინგის გაზომვის მონიტორინგი.	✓				დადებულია ხელშეკრულება შესაბამისი გაზომვის ჩატარების შესახებ (კვარტალური)
<b>5 Top Soil Protection</b>						
5.1	Topsoil is stripped and stored according to standard procedures and used further for landscaping and reclamation. წიდავის მოსაღებოები ფენის დაცვა	✓				
<b>6 Safety Measures</b>						
6.1	The workers use all personal safety equipments required for individual technological processes (hard hats, gloves, respirators, glasses, etc). მუშახელი იყენებს დასუფთავებული ტექნოლოგიური პროცესებისთვის ადეკვატურ პირად დამცვე საშუალებებს (მაგნეტი, სელააიშანი, რეზპირატორები, სათვალეები და ა.შ.)	✓				
6.2	The sites are provided with the fire fighting and emergency medical aid kits, site is fenced, site lightning, signs are installed, etc.	✓				

	სამშენებლო ობიექტზე გათვალისწინებულია ხანძარი/საფრთხილის საფრთხის შემთხვევაში დახმარების საშუალო ნაკრები. საიტო მუშაობისას, განსაკუთრებით დასუფთავებისას, საინჟინერო დამცვე/პროცესი გაკრულია და სხვ...					
<b>7 Works Completion</b>						
7.1	After completion of main works, the site undergoes final cleanup, harmonization with outward landscape and landscaping. ძირითად სამუშაოს დასრულების შემდეგ ობიექტის საბოლოო დასუფთავება, გარე ლანდშეპის პარამიტრები და გაწესება.	✓				სამშენებლო სამუშაოს დასრულების შესახებ/After completion construction works
7.2	After completion of the operations in the quarry or its certain section, the site material is backfilled, compacted, terraced and harmonized with the landscape. კარიერის ან მისი ცალკეული უბნის ექსპლუატაციის დასრულების შემდეგ ფლკო მასალის უკუბრუნება, კომპაქტირება, ტერასირება, და ლანდშეპის პარამიტრები.			✓		
7.3	Final Post Construction Environmental Audit/monitoring is conducted and Final Environmental Audit Report is prepared /საბოლოო გარემოს დაცვის მონიტორინგი/აუდიტი ჩატარებულია და საბოლოო გარემოსდაცვის აუდიტის ანგარიში მომზადებულია.	✓				სამშენებლო სამუშაოს დასრულების შესახებ/After completion of construction

შენიშვნა/Comment:





ყოველკვირეული გარემოსდაცვითი მონიტორინგი

თარიღი/Date: 12.02.2018

Weekly Environmental Monitoring

კონტრაქტის #/შპს ფერი Contract#:		ზედამხედველი: Eptisa Supervisor: Eptisa				
პროექტი/ობიექტი: URE-1 rezervuari Project/Site:		კონტრაქტორი: Contractor: შპს ფერი				
N		კი/yes	არა/no	ნაწილობრივ/Partially	არა/No	შენიშვნა/Comment
1	სამშენებლო ტერიტორიის სრულად შემოღობვა. Adequate fencing of construction area from all sides	კი				
2	საკეტის შესასვლელი ვარისმოწყობა, სტანდარტული გამაფრთხილებელი და საინფორმაციო ნიშნებით აღჭურვა Arrangement of lockable gate with standard warning and information signs			კი		
3	სამშენებლო ტერიტორიაზე და პერიმეტრზე სტანდარტული გამაფრთხილებელი და საინფორმაციო ნიშნების განთავსება. Placement of standard warning and information signs at the perimeter and inside of construction area	კი				
4	ღია დატოვებულ თხრილებზე და კვებზე უსაფრთხოების ლენტების, ბარიერების და გამაფრთხილებელი ნიშნების განთავსება Installation of safety signs/tapes and trench side barriers around of open trenches	კი				
5	1,5 მეტრზე მეტი სიღრმის ტრანშეებში კედლების გამაგრება. Strengthening of walls of the deep trenches (>1.5m) by boards	კი				
6	დასახლებულ ადგილებში ღია დატოვებულ თხრილებზე ვერტიკალური გადასასვლელების მოწყობა. Installation of proper temporary wooden/metal walkways/planks across open trenches in settlement areas				არ ეხება	
7	სამშენებლო ტერიტორიაზე, სამუშაოების ზონაში არსებული ხეების შემორაფვა (დაზიანების თავიდან აცილების მიზნით) Protect all trees nearby construction zone to avoid its damage				არ ეხება	
8	ექსკავაციის დროს, წიდაგის წაყოფიერი (დაახლოებით 20-30 სმ სისისის) ფენის მოხსნა და განვალკვეთულად დაგროვება, შენახვა. Removal of top soil (about 30 cm depth) and separately storing in appropriate place				არ ეხება	
9	სამშენებლო ნარჩენების და ჭარბი ნარჩენი გრუნტის დროული გატანა/განთავსება. Timely removal/disposal of construction waste and surplus waste soil	კი				
10	სამშენებლო ტერიტორიის ღამის საათებში განათება. Provide adequate lighting of construction territory	კი				



11	სამშენებლო ტერიტორიის შესაბამისად მოწყობა, მასალების, მოწყობილობების და დანადგარების ორგანიზებულად განთავსება. (საჭიროებიდან გამომდინარე) Proper arrangement of construction site and segregation/storing of construction materials/equipment (bring the material when required)	✓			
12	სამშენებლო ტერიტორიაზე საწვავის და საპოხი მასალების დაღვრის შედეგების სალიკვიდაციო ნაკრების (ქვიშა, ნახერხი, მცირე ზომის ავზი და სხვა) ხელმისაწვდომობა. Availability of proper fuel/oil spill response items (sand, sawdust, special containers) at the construction site		✓		
13	საწვავის და საპოხი მასალების კონტეინერების განთავსება მხოლოდ სპეციალურ გადებულ ადგილებში. Allocation of fuel and lubricants containers at the special dedicated place (with roofing and concrete flooring)			✓	
14	სამშენებლო ტერიტორიაზე საყოფაცხოვრებო ნარჩენებისთვის თავსახურიანი კონტეინერის განთავსება და შესაბამისი წარწერებით აღჭურვა (მაგ. "HOUSEHOLD WASTE") Placement of proper Household Waste container at the special dedicated place with relevant indication signs (for example "Household Waste")	✓			
15	სამშენებლო ტერიტორიაზე სახიფათო ნარჩენებისთვის თავსახურიანი კონტეინერის განთავსება და შესაბამისი წარწერებით აღჭურვა. (მაგ. "HAZARDOUS WASTE") Placement of proper Hazardous Waste container at the special dedicated places with relevant indication signs (for example "Hazardous Waste")	✓			
16	სამშენებლო ტერიტორიაზე ან მის გარეთ ტრანსპორტისთვის პარკირების ადეკვატური მოწყობა და ნიშნით აღჭურვა (მაგ. P) Arrangement of proper Parking area at the adequate place inside/outside of construction territory with relevant sign (for example P)	✓			
17	სამშენებლო მასალების და ნარჩენების ტრანსპორტირების დროს ავტო ტრანსპორტის სპეციალური საფარით (ბრეზენტით, ტენტითდასხვა) აღჭურვა Use tarpaulins cover during materials transportation			✓	
18	საჭიროებიდან გამომდინარე მტვრის წარმოქმნის პრევენცია. Dust generation prevention activities (when needed)	✓			
19	მუშების და ინჟინერ-ტექნიკური პერსონალის მიერ ინდივიდუალური დაცვის საშუალებების (ჩაფხუტი, ელექტი, ხელთათმანი, ჩექმები, დამცავისათვალე, დასხვა) სრულად გამოყენება. Ensure that all workers are provided with and use appropriate Personal Protective Equipment - helmets, hand gloves, boots, masks, safety belts	✓			
20	სიმაღლეზე მუშაობის დროს სპეციალური დამცავი აღჭურვილობის გამოყენება. Use of special safety equipment during working at heights	✓			
21	სამშენებლო ტერიტორიის მუდმივად დალაგება და დასუფთავება. Regularly cleaning of construction territory		✓		
ობიექტის გარემოსდაცვაზე პასუხისმგებელი პირი		სახელი: Name:		ხელმოწერა/ Signature:	

11	სამშენებლო ტერიტორიის შესაბამისად მოწყობა, მასალების, მოწყობილობების და დანადგარების ორგანიზებულად განთავსება. (საჭიროებიდან გამომდინარე) Proper arrangement of construction site and segregation/storing of construction materials/equipment (bring the material when required)	✓			
12	სამშენებლო ტერიტორიაზე საწვავის და საპოხი მასალების დაღვრის შედეგების სალიკვიდაციო ნაკრების (ქვიშა, ნახერხი, მცირე ზომის ავზი და სხვა) ხელმისაწვდომობა. Availability of proper fuel/oil spill response items (sand, sawdust, special containers) at the construction site		✓		
13	საწვავის და საპოხი მასალების კონტეინერების განთავსება მხოლოდ სპეციალურ გადებულ ადგილებში. Allocation of fuel and lubricants containers at the special dedicated place (with roofing and concrete flooring)			✓	
14	სამშენებლო ტერიტორიაზე საყოფაცხოვრებო ნარჩენებისთვის თავსახურიანი კონტეინერის განთავსება და შესაბამისი წარწერებით აღჭურვა (მაგ. "HOUSEHOLD WASTE") Placement of proper Household Waste container at the special dedicated place with relevant indication signs (for example "Household Waste")	✓			
15	სამშენებლო ტერიტორიაზე სახიფათო ნარჩენებისთვის თავსახურიანი კონტეინერის განთავსება და შესაბამისი წარწერებით აღჭურვა. (მაგ. "HAZARDOUS WASTE") Placement of proper Hazardous Waste container at the special dedicated places with relevant indication signs (for example "Hazardous Waste")	✓			
16	სამშენებლო ტერიტორიაზე ან მის გარეთ ტრანსპორტისთვის პარკირების ადეკვატური მოწყობა და ნიშნით აღჭურვა (მაგ. P) Arrangement of proper Parking area at the adequate place inside/outside of construction territory with relevant sign (for example P)	✓			
17	სამშენებლო მასალების და ნარჩენების ტრანსპორტირების დროს ავტო ტრანსპორტის სპეციალური საფარით (ბრეზენტით, ტენტითდასხვა) აღჭურვა Use tarpaulins cover during materials transportation			✓	
18	საჭიროებიდან გამომდინარე მტვრის წარმოქმნის პრევენცია. Dust generation prevention activities (when needed)	✓			
19	მუშების და ინჟინერ-ტექნიკური პერსონალის მიერ ინდივიდუალური დაცვის საშუალებების (ჩაფხუტი, ელექტი, ხელთათმანი, ჩექმები, დამცავისათვალ, დასხვა) სრულად გამოყენება. Ensure that all workers are provided with and use appropriate Personal Protective Equipment - helmets, hand gloves, boots, masks, safety belts	✓			
20	სიმაღლეზე მუშაობის დროს სპეციალური დამცავი აღჭურვილობის გამოყენება. Use of special safety equipment during working at heights	✓			
21	სამშენებლო ტერიტორიის მუდმივად დალაგება და დასუფთავება. Regularly cleaning of construction territory		✓		
ობიექტის გარემოსდაცვაზე პასუხისმგებელი პირი		სახელი: Name:		ხელმოწერა/ Signature:	

ობიექტის გარემოსდაცვაზე პასუხისმგებელი პირი (კონტრაქტორი)/Staff responsible for environment/safety at the site (contractor)	სახელი: Name: თენგიზ მაღლაფერიძე	ხელმოწერა/ Signature:
მშენებლობის ინსპექტორი (ზედამხედველი)/Construction site Inspector (SC/Engineer)	სახელი: ნუგზარ ზაღვაძე Name	ხელმოწერა/ Signature: <i>ნ. ზაღვაძე</i>
გარემოსდაცვის სპეციალისტი (კონტრაქტორი)/Environmental Specialist (contractor)	სახელი: Name:	ხელმოწერა/ Signature:

შენიშვნა/Comment:

შესაბამისი ფოტომასალა/Photo Material



(კონტრაქტორი)/Staff responsible for environment/safety at the site (contractor)	კონკრეტული გეგმა	
მშენებლობის ინსპექტორი (ზედამხედველი)/Construction site inspector (SC/Engineer)	სახელი: Name:	ხელმოწერა/Signature: 
გარემოსდაცვის სპეციალისტი (კონტრაქტორი)/Environmental Specialist (contractor)	სახელი: Name:	ხელმოწერა/Signature: 

შენიშვნა/Comment:

შესაბამისი ფოტომასალა/Photo Materials:



# ANNEX G: CORRECTIVE ACTION PLANS

## Kut-01



ULUSAL INSAAT ve TICARET A.Ş.

Date: 03/04/2018

Page 1 of 3

### Corrective Action Plan

<b>Project Name:</b> <i>Construction of Water Supply in Kutaisi</i>	<b>Corrective Action Plan</b>
<b>Project No:</b> <i>P 43405-İCB-KUT-01</i>	
<b>Project Location:</b> <i>Kutaisi</i>	
<b>Site:</b> <i>Godogani reservoir/Tabidze Street/Vajha-Pshavela Street/Akhalgazrdoba Street/Asatiani Street</i>	
<b>Location:</b> <i>Kutaisi</i>	
<b>Consultant:</b> <i>EPTISA</i>	
<b>Issue:</b> <i>Health, Safety and Environmental Issues</i>	
<b>Date of Site visit:</b> <i>26/03/2018</i>	<b>Notification Date:</b> <i>31.03.2018</i>

#### Corrective Action Plan

##### **Network**

SMK has already taken action to correct the subject items

- SMK took action and construction activities information signs are installed at each construction segment
- SMK's safety manager took action and safety signs/tapes and trench around of all open trenches are installed to avoid accident of population
- SMK took action and special blinking signs are provided where necessary when passing streets to avoid disturbance of car movements
- SMK took action about piles of surplus waste soil which are removed from construction area and disposed in a proper place
- SMK took action and resident houses nearby areas are clean from construction materials to avoid disturbance of residents and businesses
- SMK took action and enough and proper wooden/metal walkways/planks are installed across open trenches.
- All transmission line construction segments are cleaned/well organized on regular bases as it is possible before paving works
- SMK's all workers use PPE

##### Godogani

- Site is fenced from all sides and lockable gate will be provided as soon as possible
- SMK took action and proper warning and information signs are installed at the entrance and perimeter of the site
- Excavation area is fenced with temporary orange safety tape
- Construction territory is lighted adequately
- Safety tapes and fencing around concrete washing pit and proper sign is installed
- SMK took action and trees nearby construction site are fenced to avoid damage
- Safety officer will be available within two days at construction site
- Oils or similar liquid containers are stored properly
- Proper fuel/Oil spill response items(sand,sawdust,special containers)are available at the site
- Eccess road will be arranged after finishing heavy construction works
- Parking area with relevant sign is arranged
- All wokers are equipped with PPE

**Photos of Network and Godogani Reservoir**





Natia Babukhadia (SMK Environment)

### Corrective Action Plan

<b>Project Name:</b> <i>Construction of Water Supply in Kutaisi</i>	<b>Corrective Action Plan</b>
<b>Project No:</b> <i>P 43405-ICB-KUT-01</i>	
<b>Project Location:</b> <i>Kutaisi</i>	
<b>Site:</b> <i>Godogani reservoir/Marjanishvili street/Vajha-Pshavela Street/Akhalgazrdoba Street/Skhirtladze Street</i>	
<b>Location:</b> <i>Kutaisi</i>	
<b>Consultant:</b> <i>EPTISA</i>	
<b>Issue:</b> <i>Health, Safety and Environmental Issues</i>	
<b>Date of Site visit:</b> <i>17/05/2018</i>	<b>Notification Date:</b> <i>23.05.2018</i>
<p><b><u>Corrective Action Plan</u></b></p> <p><b>Network</b></p> <p>SMK has already taken action to correct the subject items</p> <ul style="list-style-type: none"> <li>- SMK took action and construction activities information signs are installed at each construction segment</li> <li>- SMK's safety manager took action and safety signs/tapes and trench around of all open trenches are installed to avoid accident of population</li> <li>- SMK took action and surplus waste soil is removed and disposed in a proper place on time.</li> <li>- SMK took action and Topsoil is removed and stored separately with signage.</li> <li>- SMK took action and construction materials are bought when needed to avoid its long time disposal in the streets disturbance of residents and businesses</li> <li>- SMK took action and resident houses nearby areas are cleaned from construction materials to avoid disturbance of residents and business.</li> <li>- Construction segments are watered regularly to avoid dust generation.</li> <li>- Special blinking signs or flagmen are provided when passing streets to avoid disturbance of car movements.</li> <li>- All transmission line construction segments are cleaned/well organized on regular bases as it is possible before paving works</li> <li>- SMK's all workers use PPE</li> </ul> <p><b><u>Godogani Reservoir</u></b></p> <ul style="list-style-type: none"> <li>- Site is fenced from all sides and lockable gate will be provided as soon as possible (in the process)</li> <li>- Construction territory is lighted adequately</li> <li>- SMK's safety manager took action and proper warning and information signs are installed at the entrance and perimeter of the site</li> <li>- High visible safety signs/tapes and trench side around of deep open excavation is installed from all sides to avoid accidents.</li> <li>- Electric cable is no longer in use(uninstalled) in case of installation all safety rules will be respected</li> <li>- SMK took action and trees at the construction site and nearby are protected to avoid its damage.</li> <li>- SMK took action and concrete washing pit is fenced relevant sign will be installed tomorrow.</li> <li>- Proper fuel/Oil spill response items(sand,sawdust,special containers)are available at the site</li> <li>- Containers with fuel/lubricant is managed properly.</li> <li>- SMK took action and all construction materials are properly segregated and stored adequately.</li> <li>- SMK took action and parking area is better organized and arranged properly.</li> <li>- Parking area is arranged with relevant sign</li> </ul>	



- All workrs are equipped with PPE
- Site is cleaned regularly

Photos of Network and Godogani Reservoir



Akhlagzrdoba St



Marjanishvili St.



Sulkhansaba St.



Vajha Pshavela St.



Marjanishvili St.



Skhirtladze St.



Vajha-Pshavela St



## **ANNEX H: LIST OF CONSULTATION MEETINGS CARRIED OUT BY EPTISA, CC AND UWSCG, DURING THE REPROTING PERIOD**

List of Cosultation Meetings Conducted by EPTISA, with participation of CC and UWSCG during implementation of Reg-01 and Kut-01 projects:

- February 2, 2018 - consultation meeting with households at Z. Chavchavade St. #8;
- February 9, 2018 – consultation meeting with households at Z. Chavchavadze St. #4a;
- February 9, 2018 – consultation meeting with households at Z. Chavchavadze St. #8a;
- February 16, 2018 – consultation meeting with the households at Z. Chavchavadze St. #28;
- February 16, 2018 – consultation meeting with the households at Z. Chavchavadze St. #84;
- February 23, 2018 – consultation meeting with the households at Kharebava St. #18;
- February 23, 2018 – consultation meeting with the households at Kharebava St. #20;
- March 2, 2018 – consultation meeting with the households at Kharebava St. #10;
- March 2, 2018 – consultation meeting with the households at Kharebava St. #43;
- March 23, 2018 – consultation meeting with the households at Javakhishvili St. #51

## **ANNEX I: LIST OF MEETINGS ATTENDED BY MR.ZAZA KHELADZE**

List of meetings attended by Mr.Zaza Kheladze under Kutaisi Phase I and Phase II (Reg-01 and Kut-01) projects.

- The initial stage of the public awareness campaign conducted by Eptisa within the framework of Kutaisi Water Supply Project (USIIP, Reg-01, Tranche 1) in cooperation with other local NGOs and provided its recommendations on the planning process for this campaign. Mr. Zaza Kheladze personally attended several meetings held by Eptisa and UWSCG, evidence of his presence at this meetings is presented below – photos of the meetings;
- On 6 June 2014 Mr. Zaza Kheladze took part in extended meeting carried out by Eptisa with the participation of donor, client and construction companies at the UWSCG's Kutaisi Service Center;
- On May 20, 2014 Kutaisi City Hall held a meeting of NGO Consulting Group. The meeting was attended by representatives of Kutaisi City Hall, United Water Supply Company, Construction Company "COBRA" and Supervisory Company "Eptisa" and local NGOs. The agenda of the meeting among other issues included presentation of Mr. Zaza Khealdaze on "Monitoring of the Kutaisi Water Supply Project Implementation";
- In June 12, 2015 a meeting was held with the representatives of the local NGO and the population, as well as representatives of the United Water Supply Company, construction and supervisory companies. At the meeting NGOs and local residents were informed about the project progress and future works. Mr. Zaza Kheladze participated in this meetings as well;
- There were high interest of NGOs and local population about the large-scale of Kutaisi Water Supply project (Kut-01 – phase II) as well started in July 2015. For this reason Kutaisi Service Center in cooperation with the Supervisor Consultant "Eptisa" held a meeting inviting local NGOs and AP on July 30, 2015. NGO "ASA" was among them. During the meeting Construction Company SMK (Kut-01, Phase II) presented planned activities within the above mentioned project and its long term perspectives.