

## BI-ANNUAL ENVIRONMENTAL MONITORING REPORT

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*Project Number: 43405-023*  
*January-June 2018*  
*Loan Number 2749-GEO (SF)*

### GEORGIA: URBAN SERVICES IMPROVEMENT INVESTMENT PROGRAM (TRANCHE 1) (FINANCED BY THE ASIAN DEVELOPMENT BANK)

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## 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>SEMP</b>	Site Environmental Management Plan
<b>EMP</b>	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>MFF</b>	Multi-tranche Financing Facility
<b>MEPA</b>	Ministry of Environment Protection and Agriculture
<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

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## I. 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 wastewater treatment plants.
4. Tranche 1 of the Investment Program includes:
  - Construction of Mestia Headworks (MES-01)
  - Improvement of Water Supply Infrastructure in Anaklia, Kutaisi and Poti (REG-01)
  - Construction of Mestia Water Treatment Plant and Reservoirs (REG-02)
  - UWSCG Office Building
  - Construction of the Water Supply Network in Ureki (Ure-01)

The following projects are financed under Tranche 1:

5. **Mestia Water Supply Headworks (Contract MES-01).** The project comprises of the construction of a Tyrolean Weir as intake structure on Mestia Chala River for the capture of raw water. The discharge is estimated at minimum 1,000 liters/second in dry seasons. The location has been chosen for its altitude and the possibility to supply the water treatment plant, the adjoining reservoir and from there the largest part of the distribution network, by gravity. Apart from the intake, the scope of work comprises 10.75 km transmission lines to the site of Water Treatment Plant and a reservoir and the connection of this location to the distribution network.
6. The contract MES-01 was signed on 10 October 2011 with Joint Venture of Dagi LTD – Georgia and Enguri 2006 LTD – Georgia (which changed its corporate name to Enguri - New Construction LTD on 11 April 2013), and the scheduled Time for Completion was on 31 October 2013. The contract has completed the works on the reservoir, the intake, and the transmission pipeline,

including its testing and the installation of the last section in the LARP Corridor. LARP compliance report was issued by EPTISA in July 2014. Taking over of the facilities took place on 20 July 2014.

- 7. Kutaisi, Poti & Anaklia water supply infrastructures (contract Reg-01).** The scope of works includes improvement of water supply infrastructure in Anaklia, Kutaisi and Poti, in particular, reservoirs and pumping stations, transmission lines and distribution lines of water supply systems as well as a water treatment plant in Poti. The project envisages installation of water pipelines on 96 km. Concrete water reservoirs will be built on 5 places with total capacity of 35,000m<sup>3</sup>. The project also covers construction of 4 pumping stations (with total capacity of 4,516 m<sup>3</sup>/h) as well as construction of water treatment facility.
- 8.** United Water Supply Company of Georgia under the Ministry of Regional Development and Infrastructure of Georgia signed a contract (#UWSCG/ICB/CW-2013-REG-01) with Spanish Cobra Instalaciones y Servicios. The Contract was made effective 19 September 2013.
- 9.** Construction activities were completed on 16 May 2016 and Post Construction Environmental Audit was conducted on 21-22 December 2016 by independent consultant.
- 10.** All non-compliances revealed during the Post-Construction Audit and corrective actions with deadlines to improve the situation and to be implemented by Contractor are presented in Table 11 of this report.
- 11. Construction of Office Building of UWSCG in Tbilisi.** Detailed design for construction of a new head office of UWSCG was prepared and funded by GoG. IEE for office building completed and was submitted to ADB. In 2 August 2014 the baseline survey and biodiversity study of the project area was conducted. Public Hearing meeting was held on 2 July 2014.
- 12.** The new construction area is located in the suburb area of the city in close proximity with Tbilisi State University. Number of door-to-door public consultations have been carried out with the local population. The specially developed invitation letters prior to the Public Hearing, signed by the head of UWSCG was distributed among the local population and stakeholders.
- 13.** Due to untimely issuing of permit for cutting of 9 Eldari pine trees by Ecology and Greenery Department of Tbilisi City Hall, the construction works for head office building was suspended. Finally, permission was granted and fees for tree removal was estimated by the Municipality in the amount of GEL 53,000.00. Letter of permission issued by Tbilisi City Hall is attached to this report (Annex H).
- 14.** United Water Supply Company of Georgia under the Ministry of Regional Development and Infrastructure of Georgia signed a contract (#CW/ICB/Office-01) with Georgian Construction Company DAGI Ltd on 1 December 2015. Date of commencement of civil works is December 29, 2015. The original completion date of the works was 21.06.2017. Construction activities have been delayed due to the changes in design and was renovated in October 2017. The new completion date of the works is September 2019.
- 15. MESTIA Water Supply Facilities (Contract REG-02).** The scope of works includes: a new water treatment plant (WTP); the rehabilitation of Tsniashi spring catchment; a new reservoir at Lanchvali (1,000 m<sup>3</sup>); a new reservoir at Shgedi (1,000 m<sup>3</sup>); transmission pipes of approximately 9,200 meters.

16. The Contractor has to design and build a WTP with a treated water standard that complies with the European standard for the drinking water quality and is defined in the Council Directive 98/83/EC. The new WTP will have a design capacity of 80 l/s to serve the projected population in 2040. Some of the components (hydrocyclone, micro-/ultrafiltration, drinking, process and backwash water pumps) to be constructed under this contract will be for half of the design population in 2040 at this stage. Contract was signed with JV Ludwig Pfeiffer Hock und Tiefbau GmbH & Co. KG and ProtecnoSrl on 22 September 2014 and Notice-to-Proceed given on 08 December 2014.
17. **Construction of Water Supply and Wastewater Network in Ureki/Phase I (URE-01).** The project is simultaneously financed from Tranches I, II and III and therefore might be some overlap of T1-T3 BAEMRs. The planned works under Tranche I included construction of Res-01 and Res-02 (2 x 3,000 m<sup>3</sup> and 1 x 1,200 m<sup>3</sup>) and one water supply pumping station (78m<sup>3</sup>/h and 676 m<sup>3</sup>/h), but currently location of Res-01 is changed. Final design and location is under consideration and will be finalized by the mid of January.
18. The Contract is signed with JV of Peri Ltd (Georgia) Leading Partner and Slon LLC (Azerbaijan) on October 28, 2014. Commencement date was November 24, 2014. Completion date is scheduled on November 22, 2017. The project is foreseen to serve 35,000 tourists and 5,400 local inhabitants by year 2040.

**B. Construction activities and project progress during the previous 6 months**

**Construction Activities during previous 6 months under URE-01 project (January-June 2018)**

**Table 1: Project Progress during the Previous 6 Months**

**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%
<b>Site</b>	<b>Water network</b>
Works undertaken during January-June 2018	53.47 km of HDPE pipes DN 25-560 – 107%
<b>Site</b>	<b>Sewerage network</b>
Works undertaken during January-June 2018	68.417 km of PE 100 and corrugated pipes OD 110-500 mm, SDR 11 installed – 97%

Site		Water Mains Installation
<b>URE-01</b>		
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%
		Sewer PE Pumping Station
Works undertaken during January-June 2018		Installation Works – 80%

#### REG-02 – Mestia

Mestia - Section	Works
Works undertaken during January-June 2018	Lanchvali Reservoir - 100 %
	Shkedi Reservoir - 100 %
	WTP - 99%
	Transmission main - 100 %

#### Office-01

Site	Concrete works
<b>Works undertaken during January- June 2018</b>	567,5m <sup>3</sup> pouring concrete.
Site	Reinforcement works
<b>Works undertaken during January- June 2018</b>	The used 60-ton armature.



<b>Site</b>	Filling ballast works
<b>Works undertaken during January- June 2018</b>	370m <sup>3</sup>
<b>Site</b>	Formwork Mounting works
<b>Works undertaken during January- June 2018</b>	1159m <sup>3</sup>
<b>Site</b>	Hydroisolation Primer coat works
<b>Works undertaken during January- June 2018</b>	225m <sup>2</sup> Hydroisolation for concrete wall. Primer coat 917m <sup>2</sup>
<b>Site</b>	Drainage system works
<b>Works undertaken during January- June 2018</b>	work for drainage system 122m

## 1.1 Changes in Project Organization and Environmental Management Team

### Agencies Involved in Investment Program Implementation

19. 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.
20. 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
21. 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

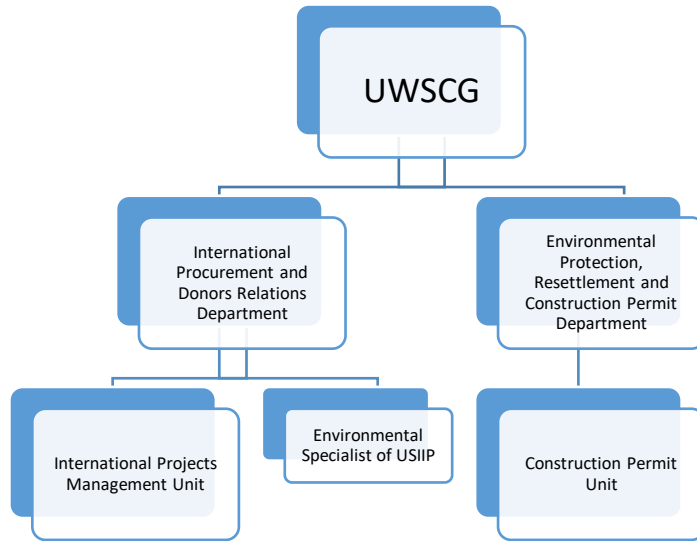
Unit of Resettlement and Environmental Protection and consist of six staff members, including Head of Department and Head of Construction Permit Unit.

22. 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.
23. 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>1</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.
24. 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
25. DC is responsible for developing and incorporation of mitigation measures in design and construction.
26. 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 SEMPs and in training and capacity-building activities. The ES prepares bi-annual and annual environmental monitoring reports and submits to ADB.
27. 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.
28. ADB is the donor financing the Investment Program Environmental management organization is shown in Figure 1 and Figure 2.

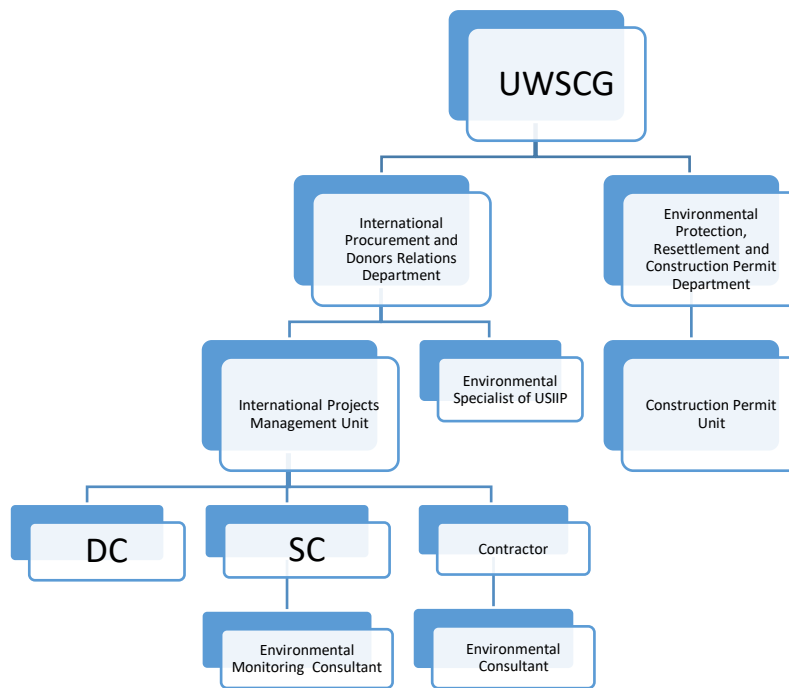
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<sup>1</sup>According to new Monitoring Manual of ADB for Safeguards Implementation instead of Site Specific EMP (SSEMP) a "Site Environment Management Plan" (SEMP) must be developed by the Contractor and then under SEMP they should develop further Site Specific EMPs and Topic Specific EMPs.

**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**

- 29.** Relationships with Contractors, Owner and Lender are considered 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.
- 30.** 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 and UWSCG; ensure compliance with Investment Program covenants.
- 31.** 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.
- 32.** The team has constant communication with the Supervision Consultant, Contractor, reviews/ comments all environmental reports submitted by DC, SC and contractors.
- 33.** All SEMP's are prepared by Contractor, endorsed by SC and approved by UWSCG/ DEPRP.
- 34.** 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 and submits weekly progress reports. Sample weekly report is attached to the proposed EMR (Annex F).
- 35.** ADB oversees project sites regularly and gives clear instructions for the project sites improvements with regard to environmental safeguards.
- 36.** To resolve the observed environmental safeguard issues, the regular Environmental Meetings are organized with participation of UWSCG/IPMO/DEPRP, Eptisa and Contractors. During the meetings environmental issues and implementation of the mitigation measures are discussed.
- 37.** A Grievance Redress Committee has been established within Ure-01 and Reg-02 projects, to date all grievances either have been dealt to the satisfaction of complainants or are still under discussion. The GRC under Office-01 project will be established within the next reporting period and reflected in EMR January-June 2018.
- 38.** Below are the list of subcontractors 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".
  - Contract was signed with hazardous waste disposal company Ltd "Sanitari" in June 2017.
- 39.** Below are the list of subcontractors of "Ludwig Pfeiffer Hech und Tiefbau GmbH and Co" under the Reg-02/Mestia project:
  1. "Insta" LLC
  2. "BREKETI DESIGN" LLC

40. List of Sub-contractors of Peri for disposal of Municipal Waste Water:
- “Solid Waste Management Company of Georgia” – contract was signed for disposal of Solid Waste from Ureki Construction sites.
41. Below are the list of subcontractors of “DAGI” under the Office-01 project:
- “Tbilservice Group” Ltd – Contract was signed for disposal of construction waste, inert waste and solid waste from Tbilisi Construction site.
42. Monthly site meetings have taken place with all Contractors during the reporting period, with a focus on progress and technical problems as well as environmental safeguard issues.
43. Under the Ure-01 and Office-01 projects, contractors have signed agreement with the National Environmental Agency for the monitoring of measurements (dust, CO, NO<sub>2</sub>, SO<sub>2</sub>, noise) at various construction sites.
44. Project organization for the awarded contracts listed above is given in the Table 2 below.

**Table 2:** List of contracts under USIIP, Tranche 1 – MES-01, REG-01, REG-02, URE-01, TBI-01, SC/EPTISA

Contract #	Sub-project Title	Employer	Contractor
<b>Contract No: UWSCG/ICB/CW/2011-MES-01</b>	MES-01	UWSCG	Joint Venture of Dagi LTD - Georgia and Enguri 2006 LTD – Georgia (on April 2013 the name of Enguri 2006 LTD was changed to Enguri - New Construction LTD)
<b>Contract No: UWSCG/ICB/CW-2013-REG-01</b>	REG-01	UWSCG	Cobra Instalaciones y Servicios SA (from Spain)
<b>Contract No: UWSCG/USSIP/ICB/CW/REG-02</b>	REG-02	UWSCG	JV of Ludwig Pfeiffer Hoch-und Tiefbau GmbH & Co.KG (Germany) and Protechno Srl (Italy)
<b>Contract No: P43405-ICB-URE-01</b>	URE-01	UWSCG	JV of Peri Ltd (Georgia) Leading Partner and Slon LLC (Azerbaijan)
<b>Contact No: No CW/ICB/Office-01</b>	TBI-01	UWSCG	Dagi LTD (Georgia)
Contract #	SC for T1,T2, T3	Employer	Consultant
<b>Contract No: UWSCG/USIIP</b>	EPTISA	UWSCG	A Consortium of Consulting Firm led by Eptisa Servicios de Ingenieria S.L. (Spain) in

Contract #	Sub-project Title	Employer	Contractor
			association with SAFEGE (Belgium) and JSC Georgian Water Project (Georgia)

## PART II - ENVIRONMENTAL MONITORING

45. 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. Monitoring sheets (Mitigation Compliance & Inspection Monitoring Forms submitted by ADB) were filled in on a daily and/or weekly basis (according to a specific site). Also unscheduled monitoring visits were carried out and non-compliance notices have been issued to the contractor as needed. Mitigation measures to reduce major environmental impacts have been instructed to contractors during the monitoring visits.
46. The following monitoring activities were performed by EPTISA`s environmental specialist during January-June 2018:
- On-site monitoring of EMP compliance during site works;
  - Preparation of environmental site inspection report and notification to Contractor by EPTISA`s Environmental Specialist (Annex C – Non-compliance Notices)
  - Advised Contactor in baseline measurements conducted by National Environmental Agency at all sites;
  - Coordinate actions in general with Contractor`s Environmental Representatives and UWSCG/Environmental Team, including Environmental Specialist of USIIP
47. EPTISA's Site Team in particular instructed Contractor to comply for the transmission pipelines with the following (as per the agreed H&S Plan):
- Provide adequate training to staff and sub-contractors on regular basis
  - Enforce the accident prevention plan on regular basis incl. precautions for safety driving, etc.
48. Environmental Monitoring Specialists hired by contractor under the URE-01, Reg-02, and Office-01 projects conducted the day-to-day monitoring of the construction sites, developed the weekly monitoring reports and submitted to SC/Eptisa.
49. Environmental Monitoring Specialist of SC developed quarterly monitoring reports for UWSCG/USIIP based on the weekly reports submitted by Contractor, and based on environmental site inspection.
50. Environmental Specialist (ES) of USIIP performed monitoring of contractor's performance with the approved SEMP, Site Specific EMPs and Topic Specific EMPs, environmental standards and other environmental commitments of the contractor. ES developed bi-annual and annual environmental monitoring reports and submitted to ADB based on the quarterly reports prepared by SC and monitoring results.
51. The USIIP's Environmental Impact Monitoring and Mitigation is carried out in accordance with the SEMP, Site Specific EMPs and Topic Specific EMPs prepared by the Contractors. The construction activities affecting the environment are as follows:
- Removal of Surplus Soil
  - Backfilling of Trenches
  - Reinstatement Activities
52. 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. Construction

activities have been carried out under Office-01, Ure-01 and Reg-02 projects are reported in this EMR.

**Table 3: Parametric Measurement Guidelines**

Parameters	Frequency & Location	Remarks
<b>Ure-01</b>		
Air Quality	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	Noise Every 3 months Reservoir #1, Pumping Station, Well Fields, 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 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.
<b>Office-01</b>		



Parameters	Frequency & Location	Remarks
Air Quality	Air Quality Every 3 months, construction site	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	Noise Every 6 months, construction site	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	During the site inspection and audit	Avoid tree cutting in unavoidable cases, implement the measures defined by the Georgian regulations
Dust generation	During the site inspection and audit	Use tarpaulins to cover loose material that is transported to and from the site by truck  Clean wheels and undercarriage of haul trucks prior to leaving construction site

**53.** 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**

**54.** 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 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	dBA		dBA	
	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

55. 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 5 (A) 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 June 2018 the obtained results are within the National Environmental Standard (Maximum Permissible Level) 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.

**Monitoring measurement data:**

**Table 5: Monitoring Measurements under Ure-01 Project (A)**

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 dBA 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>
	Pumping Station	1	0.004	0.16	0,001	<0,1	42.1

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 dBA Daytime 07:00 - 22:00
1	X 0730383 Y 4649261	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
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

56. No environmental measurements were taken by the contractor during the proposed reporting period in January-June 2018 within the framework of the Reg-02/ Mestia subproject, since all construction works are located far from sensitive receptors and all concrete works are completed in 100%. The Post-Construction Environmental Audit will be carried out and a corresponding report will be prepared during the next reporting period for the sub-project Reg-02/Mestia. The main findings of this report will be presented in EMR July-December 2018.

57. Monitoring measurements under Office-01 was conducted by the National Environmental Agency under the MoENRP. The monitoring measurements were carried out in one point on the construction site, University Street, Tbilisi. Results of Total Dust, Carbon Monoxide (CO), Nitrogen Dioxide (NO<sub>2</sub>) concentrations and Equivalent Noise Level (LAeq) are provided in the Table below (See Table 5 (C) and Annex A). Measurements were carried out at the nearest sensitive

receptors on March 22, 2018 in time interval from 11:00am to 13:00pm with following devices – Элан CO-50 / NO2 (CO, NO2), CEL-712 (Dust) and CEL-63X (Noise Level).

58. According to data received in March 2018 the obtained results exceed the National and International Environmental Standard (Maximum Permissible Level) of Noise – (55db - residential, institutional and educational), therefore additional mitigations are required and presented in table 10 below - schedule of mitigation measures to be implemented by the contractor Under Office-01 project.

Table 5: Monitoring Measurements under Office-01 Project (B)

N	Place of measurement	Coordinates	Results				
			Dusts Mg/m3	CO Mg/m3	NO2 Mg/m3	SO2 Mg/m3	Noise db
	National Environmental Standard (Maximum Permissible Level)		0,5	5,0	0,2	0,5	55 Residential; Institutional; Educational  70  Industrial; commercial
1	UWSCG Office Construction Site  University Street		0,078	0,96	0,037		66,8

## B. Health and Safety

59. The EH&S specialist of contractor DAGI, Mr. Alexander Chumburidze, within the “Office-01” project, conducted regular trainings for workers on Health and Safety Issues. As part of ongoing efforts to improve health and safety and reduce the number of accidental injuries occurring during the construction, DAGI has developed Near Misses reports in accordance with the ADB requirements after a mission on 27-30 January 2018 (Please see near misses reports in Annex H). This form has been developed to be simple and easy to fill out so that workers and supervisors can quickly complete and submit them in a time-effective manner.

### Community Health and Safety

60. Only one incident was reported during the period of January-June 2018, which would result in Community Health and Safety problems and was recorded during the mission on 27-30 January 2018.

61. In the east part of the construction territory of the “Office-01” project, there was a risk of land collapse on the border of the construction site for a residential building. Near the border was located a toilet and a guard house for the construction site. For safety reason DAGI installed wire netting gabion to stop rock falling.

#### **Worker Safety and Health**

62. On the wooden material there were nails which could damage workers during construction activities. In accordance with the instructions given to workers by EH&S Specialist of DAGI, wooden materials were cleaned from nails.

## PART III - Environmental management

### 3.1 The Environmental Management System, site-specific environmental management plan (SSEMP) and work plans

#### SSEMPs prepared under Ure-01 and Reg-02 project:

63. Since June 2018 instead of SSEMPs will be prepared SEMP with further development of Site Specific EMPs and Topic Specific EMPs.
64. Following SSEMPs were prepared within the framework of Ure-01, Reg-02 and Office-01 projects during the previous reporting periods by contractor, endorsed by SC and approved by the UWSCG/IPMO/DEPRP: SSEMPs for Well Fields, Reservoir#1 and Pumping Station under Ure-01 Project; SSEMPs for Zargashi and Lanchvali Reservoirs and Water Treatment Plant in Zargashi; SSEMP for Tbilisi Head Office for UWSCG under Office-01 project. No SEMP have been prepared during the reporting period under proposed sub-projects.

### 3.2 Site Inspections and Audits

65. Regular site monitoring visits were carried out during the reporting period by the Supervision Consultant Eptisa, UWSCG/ IPMO and Environmental Specialist of USIIP for Ure-01, Reg-02 and Office-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 Ure-01, Reg-02 and Office-01 projects. 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 legislation were therefore enforced in accordance with the legislation and the Contractor's contract for Reg-02, Ure-01 and Office-01 projects.
66. 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 6 below.

**Table 6:** 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 Environmental Safeguards Consultant Ms. Ketii Dgebuadze and Mr. Duncan Lang, Environmental Specialist, ADB	26-28 January 2018

#	Ure-01, Reg-02 and Tbilisi Office Building Site visits	Organization	Date
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) (details of this site visit is presented in Para ??? below).	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

67. 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 Lang, ADB/RETA Ms.Ketil Dgebuadze, Contractor, Supervision Consultant and UWSCG/USIIP/IPMO.
68. The Ure-01 sub-project have been visited by Workshop participants under the "Urban Services Improvement Investment Program, T3 (43405-023 ).
69. Ureki is located only 51km away from Batumi and visitors could easily get to the construction site and 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 98%.
70. 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.
71. The following main environmental issues faced during the construction phase were suggested to monitor by participants under URE-01 project:

- *Loss of topsoil due to incorrect stripping and storage*
- *Incorrect Waste Management (Hazardous Waste mixing with non-hazardous waste)*
- *Incorrect surplus soil management*
- *Inert waste management*

**72.** Other issues monitored by the participants included:

- *Management of occupational health and safety issues*

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

**Top-Soil Management**

- 73.** 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.
- 74.** 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**





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

A. 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.

C. Pumping Station (URE-01)

- Top soil at the site were managed properly to avoid its loosing
- 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

76. During the site visit detailed presentations were carried out by the contractors on Ure-01 projects.

77. There was an open discussion, many questions asked by the visitors were answered by the project team of USIIP and its environmental specialist.

78. 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.

79. 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, complaints log book, etc.

80. The following recommendation was suggested to the implementation unit on improvements in the environmental performance:

81. As the contraction activities on Reservoir #1, Pumping Station under URE-01 project is completed, major improvements can be concentrated on proper reinstatement activities.

### 3.3 Non-Compliance Notices

82. 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**).

83. 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**.
84. Non-compliance notices have been issued by SC/Eptisa under Ure-01 and Office-01 projects in following dates: 26, 27 March 2018; 24 April, 2014 and 14 May 2015 (See **Annex C**).

### 3.4 Corrective Action Plans

85. For the purpose of resolving the observed issues, the Corrective Action Plans have been developed by the contractor. Sample CAP prepared by Contractors are attached to the proposed EMR (**Annex G**). The regular Environmental Meetings were also carried out with the participation of UWSCG/IPMO/DEPRP, Eptisa, contractors. 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 7: Actions taken for Implementation of Mitigation Measures under Ure-01 and Office-01 Projects**

#### 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)	

Construction Site	Environmental Issues	Action taken
	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	Only Partially Completed  (Recommendations to address Environmental Issues are provided in Table 10)
	Site fencing should be completed 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 operational 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).

Construction Site	Environmental Issues	Action taken

**Office-01: TBILISI HEAD OFFICE**

Construction Site	Environmental Issues	Action taken	
Tbilisi Office	Head		
		Construction territory visible fencing should be restored in some locations	Partially Completed
		All trees at the construction area and nearby should be protected on proper way (freed from surplus waste soil and stones) to avoid its damage	Completed
		Surplus waste soil should be removed from the construction territory and disposed according agreement	Completed
		Special safety equipment during working at heights should be used	Completed
		Safety norms during works at the height should be respected to avoid workers damage	Completed
		Ladder safety should be ensured	Completed
		Safety rules with electric cable use should be respected	Completed
		Walls of the deep trenches (>1.5m) should be strengthened by boards to avoid landfall of the soil and accidents	Completed
		The slope near of the construction area should be strengthened by special grid to avoid land/stone falling and damage	Partially Completed (Recommendations to address Environmental Issues are provided in Table 10)
	Construction territory and wooden materials should be freed from used nails to avoid personnel damage	<b>Not Completed</b> (Recommendations to address Environmental Issues are provided in Table 10)	
	The way to the waste containers should be freed from construction materials	Completed	

Construction Site	Environmental Issues	Action taken
	All construction materials should be properly segregated and stored adequately	Partially Completed (Recommendations to address Environmental Issues are provided in Table 10)
	All workers should be equipped with complete PPE	Completed
	Site internally should be arranged properly and cleaned regularly	Partially Completed

86. An Annual Environmental Compliance Safeguard Review Mission was carried out on 27-30 January 2018 to review environmental safeguards compliance of Tranche 1 project.

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

**Table 8: Status of Findings of ADB Mission Carried Out on 27-30 January 2018**

Project	Specific Issues	Deadline for submission/Implementation	Implementation Status
<b>Status of findings of ADB mission carried out on 27-30 January 2018</b>			
<b>Ure-01 Construction of Reservoir #1 in Ureki</b>			
	<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 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</p>		All construction activities are completed now and there is no need to hire H&S Specialist under Ure-01 sub project.

Project	Specific Issues	Deadline for submission/Implementation	Implementation Status
	<p>the Supervision Consultants and the PIU.</p> <p><u>No other major environmental issues were identified</u></p>		
<b>Reg-02 Construction of Reservoir #1 in Mestia (Shkedi, Zargashi)</b>			
	Contractor to install fencings for all sites (Shgedi and Zargashi) and equipped with lockable gate with proper warning and information signs to avoid unexpected access of tourists on site	Q1, Q2 2018.	Partially completed, will be finalized in Q3 of 2018 and reflected in EMR July-December 2018

#### **Actions taken regarding the action plan of the EMR July-December 2017:**

**Table 9:** Status of implementation of action plan of July-December 2017

Specific issues: Recommendations Reg-02/Mestia	Implementation Status
<ol style="list-style-type: none"> <li>1. Conduct monitoring of environmental quality under Reg-02/Mestia sub-project, at Shkedi reservoir and Zargashi WTP sites by the end of March 2018.</li> <li>2. Carry out noise measurement at the nearest sensitive receptors and at the construction site by the end of March 2018.</li> </ol>	Not Completed since no construction activities took place during the reporting period and also sensitive receptors are far from construction sites
<b>Recommendations: Ure-01 and Office-01</b>	
<ol style="list-style-type: none"> <li>3. Conduct monitoring of environmental quality under Ure-01 project at network site, Pumping Station and Rez-01 by the end of March 2018.</li> <li>4. Carry out noise measurement at the nearest sensitive receptors and at the construction site by the end of March 2018.</li> </ol>	Completed in May 2018 Measurement data are reflected in proposed EMR January-June 2018

<p>5. Conduct monitoring of environmental quality under Office-01 project at construction site.</p>	<p>Completed in April 2018 Measurement data are reflected in proposed EMR January-June 2018</p>
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### 3.6 Consultations and Complaints

#### Public Awareness Activities:

#### Consultation meetings with the local population

- 87. During the reporting period Public Awareness activities have been carried out only under Ure-01 project.
- 88. The door to door campaigns were organized by SC, CC and UWSCG with the effected population to raise their awareness on project, safe water supply, sanitation and other related issues.

#### Trainings

- 89. On site environmental safeguard trainings were organized for URE-01 and Office-01 projects 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 SSEMP requirements. The main issues of discussion were the site management and implementation of mitigation measures in accordance with the SSEMPs.
- 90. It is planned to conduct training for representatives of SC and CC in order to introduce a new manual developed by ADB for monitoring of environmental safeguards implementation within the next reporting period (June-December 2018) as well as new requirements of ADB for the development of Site Environmental Management Plans with further site specific and topic specific EMPs.
- 91. The H&S specialist of contractor DAGI conducted regular worker's trainings on Health and Safety Issues and developed Near Misses reports in accordance with the ADB requirements after a mission on 27-30 January 2018 (Please see near misses reports in **Annex H**).

#### Grievance redresses mechanism (GRM)

- 92. For the effective implementation of a GRM system under the USIIP, UWSCG issued special order (#122) on 30 April 2014. The "Establishment of GRM within the Framework of the Asian Development Bank Funded Projects" signed by the head of UWSCG gives clear instructions to every involved stakeholder how to act when affected people are impacted by the project. Detailed procedures for GRM System is provided in Annex E.
- 93. Focal Person/CLO, responsible for implementation of GRM is assigned for each sub-project by the CC.
- 94. No complaints have been received under Ure-01 and Office-01 Projects during the reporting period.

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

### 4.1 Conclusions and recommendations

95. As presented in this report, Tranche-1 of this Investment Program is being implemented in compliance with the ADB Safeguards Policy Statement, 2009, National Legislation and overall EARF.
96. Necessary instructions have been given to the Contractor by UWSCG and SC to follow the EMPs and SSEMPs under Office-01 and Ure-01 projects.
97. More detailed recommendations with indication of the entities responsible for their implementation are provided in the table 10 below:

**Table 10:** Recommendations to Address Environmental Issues under Reg-02, Ure-01 and Office-01 projects

Recommendations Ure-01 and Office-01 projects	
Recommendations Reg-02/Mestia sub-project, Ure-01, Office-01	
Reg-02/Mestia sub-project	<p>Conduct Post-construction Audit and prepare corresponding Report.</p> <p>All main findings to be presented in EMR July – December 2018.</p>
Recommendations Ure-01 project	
Ure-01, Pumping Station	
Surplus waste soil should managed properly (fencing, signage, piling standard) and remove for final disposal	<p>Contractor is instructed to remove surplus waste soil that is temporarily located at the construction area.</p> <p>Surplus soil will be used for reinstatement purposes for Reservoir #1 under the Ure-01 sub-project.</p>
Recommendations Ure-01 project	
Ure-01, Construction Materials Storage Area	
Construction equipment should be in good condition	Contractor is given strong instruction to improve the



<b>Recommendations Ure-01 and Office-01 projects</b>	
<b>Recommendations Reg-02/Mestia sub-project, Ure-01, Office-01</b>	
Site fencing should be complete and with visible materials on it	situation, develop CAP and send improved photos of site.
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	
Waste should be placed at the proper standard waste containers with labeling	
<b>Recommendations Office-01</b>	
<b>Office-01 Construction site</b>	
The slope near of the construction area should be strengthened by special grid to avoid land/stone falling and damage	Contractor is instructed to improve the situation within the identified deadline and present improved photos to UWSCG.
Construction territory and wooden materials should be freed from used nails to avoid personnel damage	
Construction territory visible fencing should be restored in some locations	
All construction materials should be properly segregated and stored adequately	
Site internally should be arranged properly and cleaned regularly	
Noise from the construction activities should not cause disruption and nuisance to nearby community and other sensitive receptors (i.e. school, hospitals).	<p>Instruction are given to contractor to improve the situation and to conduct following mitigation measures:</p> <p>Plan activities in consultation with SC and IPMO/UWSCG so that activities with the greatest potential to generate noise are planned during periods of the day</p>

Recommendations Ure-01 and Office-01 projects	
Recommendations Reg-02/Mestia sub-project, Ure-01, Office-01	
	<p>that will result in least disturbance;</p> <p>Noisy construction activities will be avoided during night time;</p> <p>All construction equipment and vehicles shall be well maintained, regularly inspected for noise emissions;</p> <p>Impose speed limits on construction vehicles to minimize emissions along areas where sensitive receptors are located (i.e. temples, hospitals, schools, houses)</p> <p>Install noise barriers (e.g., panels, curtains, or partitions) to reduce the emission of engine noise.</p>

98. Mitigation measures were implemented by the contractor under the Reg-01 project (Construction of Water Supply Infrastructure in Anaklia, Kutaisi and Poti) in accordance to the Final Audit Report are presented in the **Table 11** below.

**Table 11:** Schedule of mitigation measures to be implemented by the contractor Under Reg-01 project

Construction Site	Noncompliance	Corrective Action	Time
Darcheli Reservoir	As the security staff stated, there is no an office for the security staff on the territory of Darcheli reservoir where they can overnight or have a rest. Consequently, they have to overnight and rest in their own car.	Completed	Contractor has constructed Guard house for Darcheli. It's almost 100 % done already.
Nabada Reservoir Site	The site of the reservoir is not leveled and in case of abundant precipitations, large part of the reservoir area is flooded increasing the risk of pollution of the underground waters	The sewage pumping system on the site of Nabada reservoir is not complete contributing to the increased risk of pollution of underground waters	July 2016 Status: Not Completed Will be improved under Pot-01 Project (The bidding process is underway and the Real Construction will be started in February 2018).
Nabada Reservoir Site	The sewage pumping system on the site of Nabada reservoir is not complete contributing to the increased risk of pollution of underground waters	The installation and exploitation of the sewage pumping unit is to be accomplished.	Comment: Will be improved under Pot-01 Project (The bidding process is underway and the Real Construction will be started in February 2018).
Kutaisi/ Kldiashvili Pumping Station	Noise emission of the Pumping Station is obviously high and NOT acceptable and exceed standards.	Completed.	Completed. Noise level is reduced down to 45dBA.

#### 4.2 Action Plan for the next period

6. Conduct monitoring of environmental quality under Ure-01 project at network site and nearest sensitive receptors by the end of July 2018.

**Table 12: The Specific Plan for Environmental Measurement under Ure-01 Project**

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

7. Conduct Post-Construction Environmental Audit and prepare corresponding Audit report under Reg-02/Mestia sub-project.
8. Conduct monitoring of environmental quality under Office-01 project at Head Office Construction site of UWSCG by the end of July 2018.
9. Carry out noise measurement at the nearest sensitive receptors and at the construction site by the end of July 2018.

**Table 13: The Specific Plan for Environmental Measurement under Office -01 Project**

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

**ANNEXES:**

**ANNEX A: MONITORING MEASUREMENTS DATA**

**URE - 01**

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

Sampling 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
Tsyermagala 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
Shekvetili 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
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
Natanobi 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

  
O. Kenin  
S. katsava  
G. Mergoshin  
  
M. Azabidze

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

სინჯის ადგილის ადგილი, კოორდინატები	სინჯის №	ხაერ ი დბ	კონცენტრაცია მკ/მ <sup>3</sup>					
			ნაერის ნაბინძურებადები	ნაბინძურების რეჟიმის CO	აზოტის დიოქსიდის NO <sub>2</sub>	მტვერი	გოგირდის დიოქსიდის SO <sub>2</sub>	გოგირდწყალბადი H <sub>2</sub> S
წყარბაღალა 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
მკვეთილი 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	0,005	0,006	<0,1	<0,1
	4	51,9	<1	1,52	0,002	0,008	<0,1	<0,1
სამხასყე 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 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

შეზღუდვებები:

ზოგადი სპეციალისტი

ზოგადი სპეციალისტი

სპეციალისტი

შეთანხმებულია:

გარემოს დამაბინძურების მონიტორინგის დეპარტამენტის უფროსი

  
 ოცენია  
 ს.ხადავა  
 გ.მორგოშია  
  
 მ. არაშიძე

საქართველოს გარემოს დაცვისა და სოფლის მეურნეობის სამინისტრო  
MINISTRY OF ENVIRONMENT PROTECTION AND AGRICULTURE OF GEORGIA



სსიპ გარემოს ეროვნული სააგენტო  
LEPL NATIONAL ENVIRONMENTAL AGENCY

N 12/1-130

22 03 2018

შპს "დაგი"-ს დირექტორს  
ზ-ნ მიხეილ შარანგიას

შატონო მიხეილ,

საქართველოს გარემოსა და ბუნებრივი რესურსების დაცვის სამინისტროს სსიპ "გარემოს ეროვნულ სააგენტო"-სა და შპს "დაგი"-ს შორის 2018 წლის 28 თებერვალს გაფორმებული ფასიანი მომსახურების შესახებ №ფმ-3/127 ხელშეკრულების შესაბამისად, გაწვდით, ქ. თბილისში, უნივერსიტეტის ქუჩაზე მდებარე სამშენებლო მოედანზე, თქვენს მიერ მითითებული ატმოსფერული ჰაერის ერთ წერტილში ჩატარებული გაზომვების შედეგებს - მტვერის, ხმაურის, ნახშირყანგისა და აზოტის დიოქსიდის შემცველობაზე.

დანართი: 2 გვ. (ქართულ და ინგლისურ ენაზე)

პატივისცემით,

სააგენტოს უფროსი



ნინო თანდილაშვილი



ხელშეკრულება N ფმ-3/127, 28. 02. 2018 წელი

ქ. თბილისში, უნივერსიტეტის ქუჩაზე, სამშენებლო მოედანზე, დამკვეთის მიერ მითითებულ ერთ წერტილში ატმოსფერულ ჰაერში მტვერის, ნახშირბადის ოქსიდის (CO), აზოტის დიოქსიდის (NO<sub>2</sub>) კონცენტრაციებისა ( მგ/მ<sup>3</sup> ) და ხმაურის ექვივალენტური დონის (LAeq) გაზომვების შედეგები.

გაზომვის ადგილი	მტვერი, მგ/მ <sup>3</sup>	CO, მგ/მ <sup>3</sup>	NO <sub>2</sub> , მგ/მ <sup>3</sup>	ხმაური, (LAeq)
სამშენებლო მოედანი	0,078	0,96	0,037	66,8
ზღვ	2,0	20,0	5,0	80,0

ზღვ – ატმოსფერულ ჰაერში ზღვრულად დასაშვები კონცენტრაციების /ხმაურის დონის მნიშვნელობებია.

გაზომვები ჩატარდა 2018 წლის 20 მარტს 11:00 სთ–დან 12:00 სთ–მდე დროის ინტერვალში ხელსაწყოებით Յაჰი CO-50/NO<sub>2</sub> (CO, NO<sub>2</sub>), CEL-712 (მტვერი) და CEL-63X (ხმაურის დონე).

შემსრულებლები:

გ. ნარსია 

გ. ხაჩიშვილი 

შეთანხმებულია:

გარემოს დაბინძურების მონიტორინგის  
დეპარტამენტის უფროსი



მ. არაბიძე



**Agreement N 3/127, 20. 03. 2018**

Results of Total Dust , Carbon Monoxide (CO), Nitrogen Dioxide (NO<sub>2</sub>) concentrations and Equivalent Noise Level (LAeq) measurements in one point of construction site on The University Street, Tbilisi, set by the customer.

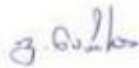
Site	Total Dust, mg/m <sup>3</sup>	CO, mg/m <sup>3</sup>	NO <sub>2</sub> , mg/m <sup>3</sup>	LAeq, dB
University Street	0,078	0,96	0,037	66,8
MPC	2,0	20,0	5,0	80,0

**MPC** - maximum permissible concentrations/noise levels in the air of working area.

Measurements were carried out on March 20, 2018 in time interval from 11:00 am to 12:00 am with following devices – Элан CO-50 / NO<sub>2</sub> (CO, NO<sub>2</sub>), CEL-712 (Dust) and CEL-63X (Noise Level).

Executors:

G.Narsia



G. Khachishvili



Agreed:

Head of Environmental  
Pollution Monitoring Department



M. Arabidze

## ANNEX B: PROJECT PHOTOS

### Ure-01

#### Pumping Station



### Reservoir#1



#### Fencing Works on Well Fileds





**Reg-02/ Mestia**

**Reg-02: GRM Box at Shkedi Rezervoir**



**Reg-02: Zargashi WTP**



**Tbilisi Head Office: Office-01**



**Office-01 – Storage of construction materials**



**Office-01 – Waste Management**




**Office-01 protection of local tress**

# ANNEX C: NON-COMPLIANCE NOTICES

Ure-01 - 26.03.2018

## Non-Compliance Notice

<b>Project:</b> USIIP	<b>Non-compliance Notice UREKI</b>
<b>Contract No:</b> URE-01	
<b>Contractor:</b> PERI	
<b>Reference:</b> <b>UREKI - UREKI PUMPING STATION</b>	
This notice is to advise you, the prime Contractor, on the referenced Contract, of the following notice on environmental measures to be implemented <b>urgently</b> .	
<b><u>NON-COMPLIANCE IN UREKI</u></b>	
<b>PAMPING STATION</b>	
<ul style="list-style-type: none"><li>- Entrance door and fencing of the construction site should be in better condition and complete</li><li>- Piles of soil at the construction territory should be managed properly</li><li>- Top soil should be separated from surplus waste soil and managed properly (fencing, signage, piling standard)</li><li>- Safety tapes around open trenches should be installed</li><li>- The site access road and internal roads should be better arranged (graveling)</li><li>- All workers should be equipped with complete PPE</li><li>- Site internally should be arranged properly and cleaned regularly</li></ul>	
	



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 <b>urgently</b> .	
<b><u>NON-COMPLIANCE IN UREKI</u></b>	
<ul style="list-style-type: none"><li>- Construction equipment should be in good condition (non leakage)</li><li>- Proper fuel/oil spill response items (sand, sawdust, special containers) should be available at the site</li><li>- Construction waste (wooden, metal, plastic, etc.) should be removed from construction area completely and timely</li><li>- Site gate should be operation at every entrance or exit with relevant signage</li><li>- Site fencing should be complete and with visible materials on it</li><li>- Oil spillage traces should not be available at the site</li><li>- Waste should be placed at the proper standard waste containers with labeling</li><li>- Containers of lubricants should be managed properly (concrete flooring and relevant roofing)</li><li>- Construction materials should be segregated precisely and stored properly</li><li>- Site internally should be arranged properly (including signage) and cleaned regularly (animals should not be available at the site)</li></ul>	





All these conditions have to be remedied within ten days (by the 4 May 2018) by the prime Contractor (Peri).

**Date of site visits: 17.04-18.04.2018**

Irakli Legashvili  
EPTISA – Environment  
Kate Chomakhidze  
Environmental Specialist – USIIP UWSCG  
Maka Goderdzishvili  
Head of Environmental Department - UWSCG

### Non-Compliance Notice

<b>Project:</b> USIIP	<b>Non-compliance Notice TBILISI</b>
<b>Contract No:</b> TBI-01	
<b>Contractor:</b> DAGI	
<b>Reference:</b> <b>Tbilisi – NEW OFFICE BUILDING FOR UWSCG</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 TBILISI**

##### **Construction of New Office Building for UWSCG**

- Construction territory visible fencing should be restored in some locations
- All trees at the construction area and nearby should be protected on proper way (freed from surplus waste soil and stones) to avoid its damage
- Surplus waste soil should be removed from the construction territory and disposed according agreement
- Special equipment during working at heights should be used
- Safety norms during works at the height should be respected to avoid workers damage
- Ladder safety should be ensured
- Safety rules with electric cable use should be respected
- Walls of the deep trenches (>1.5m) should be strengthened by boards to avoid landfall of the soil and accidents
- The slope near of the construction area should be strengthened by special grid to avoid land/stone falling and damage
- Construction territory and wooden materials should be freed from used nails to avoid personnel damage
- The way to the waste containers should be freed from construction materials
- All construction materials should be properly segregated and stored adequately
- 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 (Dagi).

**Date of site visits: 27.03.2108**

Irakli Legashvili  
EPTISA - Environment

**Non-Compliance Notice**

Project: USIIP	<b>Non-compliance Notice TBILISI</b>
Contract No: TBI-01	
Contractor: DAGI	
Reference: Tbilisi – NEW OFFICE BUILDING FOR UWSCG	

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 TBILISI**

**Construction of New Office Building for UWSCG**

- Surplus waste soil should be removed from the construction territory (especially from green zone)
- Everyday safety related instructions should be carried out with relevant signature from personnel
- Safety norms during works at the height should be respected to avoid workers damage
- High visible safety signs/tapes and strong barriers should be installed at complete perimeter and at the each floor of the construction building to avoid workers falling/damage
- Trees at the construction area and nearby should be protected on proper way to avoid its damage
- Special equipment during working at heights should be used
- Construction territory and wooden materials should be freed from nails to avoid personnel damage
- The access to the waste containers should be freed from construction materials
- Waste should be discharged timely
- All construction materials should be properly segregated and stored adequately
- Fuel/oil spill spots should be remedied promptly using special response items (sand, sawdust, special powder)
- The slope near of the construction area should be strengthened by special grid to avoid land/stone falling and workers damage
- 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 18 May 2018) by the prime Contractor (Dagi).

**Date of site visits: 14.05.2108**

Irakli Legashvili  
 EPTISA – Environment  
 Ketevan Chomakhidze  
 UWSCG USIIP Environment

**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	

Reference	Requirement	Action to date	Action required/comment
<b>Ure-01</b>			
<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	

Reference	Requirement	Action to date	Action required/comment
	Construction territory visible fencing should be restored in some locations	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.
	All trees at the construction area and nearby should be protected on proper way (freed from surplus waste soil and stones) to avoid its damage	Completed	
	Surplus waste soil should be removed from the construction territory and disposed according agreement	Completed	
	Special equipment during working at heights should be used	Completed	
	Safety norms during works at the height should be respected to avoid workers damage	Partially Completed	
	Ladder safety should be ensured	Completed	
	Safety rules with electric cable use should be respected	Completed	
	Walls of the deep trenches (>1.5m) should be strengthened by boards to avoid landfall of the soil and accidents	Completed	
	The slope near of the construction area should be strengthened by special grid to avoid land/stone falling and damage	Partially Completed	
	Construction territory and wooden materials should be freed from used nails to avoid personnel damage	Not Completed	
	The way to the waste containers should be freed from construction materials	Completed	
	All workers should be equipped with complete PPE	Partially Completed	



Reference	Requirement	Action to date	Action required/comment
	Site internally should be arranged properly and cleaned regularly		
	All construction materials should be properly segregated and stored adequately	Partially Completed	

## ANNEX E: Grievance redresses mechanism (GRM)

99. There was no GRM system existing under USIIP before the Reg-01 project. Therefore, there was no structured mechanism and procedure to help the affected population and stakeholders send their grievances related to project-induced environmental impacts and nuisances to UWSCG or directly to the administrative bodies responsible for environmental protection.
100. For the effective implementation of a GRM system under the USIIP, UWSCG issued special order (#122) on 30 April 2014. The “Establishment of GRM within the Framework of the Asian Development Bank Funded Projects” signed by the head of UWSCG gives clear instructions to every involved stakeholder how to act when affected people are impacted by the project.
101. 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.
102. 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.
103. The service centre operators, who are trained<sup>2</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>3</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.
104. When a grievance is solved positively in the first stage, the grievance is closed through an Agreement Protocol, which is reflected in the e-Document – Task Management System.
105. 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:

---

<sup>2</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>3</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.

- 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

**106.** 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.

**107.** 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.

**108.** 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. They can also apply to ADB at the address below:

- *Complaints Receiving Officer, Accountability Mechanism*
- *Asian Development Bank Headquarters*
- *6 ADB Avenue, Mandaluyong City 1550, Philippines*
- *Email: amcro@adb.org, Fax +63-2-636-2086*

# ANNEX F: WEEKLY ENVIRONMENTAL MONITORING REPORT

URE-01 – 12 February, 2018




## ყოველკვირეული გარემოსდაცვითი მონიტორინგი

თარიღი/Date: 12.02.2018

### Weekly Environmental Monitoring

კონტრაქტის №: შპს ღერი Contract#: _____		ზედამხედველი: Eptisa Supervisor: Eptisa				
პროექტი/ობიექტი: URE-1 rezervuari Project/Site: _____		კონტრაქტორი: Contractor: შპს ღერი				
N		კი/yes	არა/no	საწილ იზრდე/Partially	არეზე ნა/No. A	შენიშვნა/Comment
1	სამშენებლო ტერიტორიის სრულად შემოღობვა. Adequate fencing of construction area from all sides	კი				
2	საკეტაინი შესასვლელი კარის მოწყობა, 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	ღიად დატოვებულ თხრილებზე და ქვებზე 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 ღიად დატოვებულ თხრილებზე ედროებითი გადასასვლელების მოწყობა. Installation of proper temporary wooden/metal walkways/planks across open trenches in settlement areas				არ ეხება	
7	სამშენებლო ტერიტორიაზე, სამუშაოების ზონაში არჩენული ხეების შემორაცვა (დაზიანების თავიდან აცილების მიზნით) Protect all trees nearby construction zone to avoid its damage				არ ეხება	
8	ექსკავაციის დროს, წიაღისეულის ნაყოფიერი (დაახლოებით 20-30 სმ სისისის) ფენის მოხსნა და განცალკევებულად 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)	კი				
12	სამშენებლო ტერიტორიაზე საწვავის და საპოხი მასალების დაღვრის შედეგების სალიკვიდაციო ნაკრების (ქვიშა, ნახერხი, მცირე ზომის ავზი და სხვა) ხელმისაწვდომლობა. Availability of proper fuel/oil spill response items (sand, sawdust, special containers) at the construction site		არა			
13	საწვავის და საპოხი მასალების კონტეინერების განთავსება მხოლოდ სპეციალურ გადახურულ ადგილზე. Allocation of fuel and lubricants containers at the special dedicated place (with roofing and concrete flooring)				არ ეხება	
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")	კი				
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")	კი				
16	სამშენებლო ტერიტორიაზე ან მის გარეთ ტრანსპორტისთვის პარკირების ადგილის 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)	კი				
17	სამშენებლო მასალების და ნარჩენების ტრანსპორტირების დროს ავტო ტრანსპორტის სპეციალური საფარით (ბრუნენტით, ტენტითდასხვა) აღჭურვა Use tarpaulins cover during materials transportation		კი			
18	საჭიროებიდან გამომდინარე მტვრის წარმოქმნის პრევენცია. Dust generation prevention activities (whenneeded)	კი				
19	მუშების და ინჟინერ-ტექნიკური პერსონალის მიერ ინდივიდუალური დაცვის საშუალებების (ჩაფხუტი, ფილეტი, ხელთათმანი, ჩექმები, დამცავისათვალე, დასხვა) სრულადგამოყენება. Ensure that all workers are provided with and use appropriate Personal Protective Equipment - helmets, hand gloves, boots, masks, safety belts	კი				
20	სიმაღლეზე მუშაობის დროს სპეციალური დამცავი აღჭურვილობის გამოყენება. Use of special safety equipment during working at heights	კი				
21	სამშენებლო ტერიტორიის მუდმივად დალაგება და დასუფთავება. Regularly cleaning of construction territory	კი				

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: ნურზარ ზაურაძე Name	ხელმოწერა/ Signature: 
გარემოსდაცვის სპეციალისტი (კონტრაქტორი)/Environmental Specialist (contractor)	სახელი: Name:	ხელმოწერა/ Signature:

შენიშვნა/Comment:

შესაბამისი ფოტომასალა/Photo Material



TBI-01 – 26.03.2018

ყოველკვირეული გარემოსდაცვითი მონიტორინგი  
Weekly Environmental Monitoring

Name of the Contractor and project number/lot მშენებელი კონტრაქტორის სახელი და პროექტის/ლოტის ნომერი	Dagi LTD (საქართველო); თბილისი საზღვრეთაღის რ-ნ ყაზბეგის №14 Contact: No CW/IGB/Office-01	
კონტრაქტის #: Contract #:		
Description and Location of the Site სამშენებლო საიტის ადგილმდებარეობის აღწერა	This subproject is located in Tbilisi, at the University street. There is no intensive traffic on University street (no traffic lights and traffic jam). Geographically, it is situated at 41°43'07.06", latitude and 44°43'10.48" Longitude, app 547m above the SL.	
Implementing Agency განხორციელებული სააგენტო	შპს „საქართველოს გაერთიანებული წყალმომარაგების კომპანია“ "United Water Supply Company of Georgia", LLC.	
Supervisor's Identity (name, last name, contact information and signature) საზედამხებელი კომპანიის წარმომადგენლის სახელი, გვარი, საკონტაქტო ინფორმაცია და ხელმოწერა	Supervisor's company: I.I.C Eprisa საზედამხებელი კომპანიის : შპს ეპრისა სახელი გვარი: ვახტანგი ლომთაძე Name: Vaxtang Lomtadze ხელმოწერა/ Signature: 	მობილურის ნომერი: 577 177 096      Mobile Phone: 577 177 096
Current Stage of Civil Works სამშენებლო სამუშაოების მიმდინარე სტადია	მიმდინარე, On-going	
Weather Conditions აზინდის პირობები	Good კარგი	
ობიექტის გარემოს დაცვაზე პასუხისმგებელი პირი (კონტრაქტორი) Staff responsible for environment/safety at the site (contractor)	სახელი: ალექსანდრე ტუმბურიძე Name: Alexandre Tchumburidze	ხელმოწერა/ Signature: 
გარემოს დაცვის სპეციალისტი (კონტრაქტორი) Environmental Specialist (contractor)	სახელი: ალექსანდრე ტუმბურიძე Name: Alexandre Tchumburidze	ხელმოწერა/ Signature: 

Date/თარიღი: 26.03.2018.

2

N	Documents and Facts to be Examined შეამოწმებელი დოკუმენტები და ფაქტები	ყო yes	არა no	ნაწილ Partially	არ არის N.A	შენიშვნა/ Comment
<b>I EMPs/SSEMPs, Protocols and Reports</b>						
L1	Contractor's Site-specific Environmental Management Plan (SSEMP) is prepared, reviewed and approved by PIU prior to contractor commencing the works. მუშაზე დასრულებული და დამტკიცებულია საიტ-სპეციფიკური გარემოსდაცვითი მართვის გეგმა.	<input checked="" type="checkbox"/>				Construction of Head office for United Water Supply Company of Georgia", March 2016
L2	Construction contractor has National Environmental Specialist in staff. მშენებელი კონტრაქტორის დადებული აქვს ხელშეკრულება ადგილობრივ გარემოსდაცვით სპეციალისტს მართვის სპეციალისტთან.	<input checked="" type="checkbox"/>				ხელშეკრულება გაფორმდა პროექტის დაწყებისთანავე
L3	Construction contractor has International Environmental Specialist in staff. მშენებელი კონტრაქტორის დადებული აქვს ხელშეკრულება საერთაშორისო გარემოსდაცვით სპეციალისტს მართვის სპეციალისტთან.		<input checked="" type="checkbox"/>			ხელშეკრულება არა გაფორმებული
L4	Monthly environmental monitoring reports are prepared by the Contractor and submitted to the Supervisor Consultant მონაცემები გარემოსდაცვითი მართვის გეგმის განხორციელების ყოველთვიური ანგარიშები კონტრაქტორის მიერ და წარედგინა კონსულტანტსთან.	<input checked="" type="checkbox"/>				ყოველთვიური ანგარიშები კონსულტანტის მიერ ვსაინფორმაციო
L5	Emergency Response Plan is prepared and approved. მუშაზე დასრულებული და მიღებულია ავარიული სიტუაციებზე რეაგირების გეგმა.	<input checked="" type="checkbox"/>				მიღებულია ავარიული სიტუაციებზე რეაგირების გეგმა
L6	Health and Safety Management Plan is prepared and approved. მუშაზე დასრულებული და მიღებულია ჯანდაცვის და უსაფრთხოების მართვის გეგმა და ჯანდაცვის და უსაფრთხოების მართვის სისტემის მუშაობის ფორმალური.	<input checked="" type="checkbox"/>				მიღებულია ჯანდაცვის და უსაფრთხოების მართვის გეგმა
L7	Complaints log exists on construction site. ხაზიერების ჟურნალი/რეგისტრია არსებობს სამშენებლო საიტზე.	<input checked="" type="checkbox"/>				სამშენებლო საიტზე არსებობს ხაზიერების ჟურნალი
L8	Site inspection non-compliance notices issued and corrective action requests implemented. შეუსაბამოების შეტყობინებების მიწოდება და წარედგინა კონტრაქტორისთვის და რეაგირების მოთხოვნების განხორციელება.			<input checked="" type="checkbox"/>		შპს დაციის მიერ საიტის აღმონებელი მართვის ტექნიკური მართვის სტანდარტით (45 ერთეულზე) შესაბამისი დონის მიწოდება წარმოადგენს კონსულტანტის მიერ მიწოდებული დასრულებული მართვის (compliance) საფრთხის თვითმართვის მართვის გეგმის განხორციელება კლიენტის მიერ გრუნტი.

3	1.9	Training/Capacity building activities undertaken as per EMP requirements and records kept of trainings. გაფორმებული და ხელმოწერილია მუშახელის ტრენინგის ოქმი განადგვისა და უსაფრთხოების საკითხებზე ტრენინგის ანგარიშები მოწოდებულია და ინახება საიტის კვანძზე.	<input type="checkbox"/>			უსაფრთხოების საკითხებზე ტრენინგის ტრენინგები იცავს ტექნიკური უსაფრთხოების კურსალი, სამუშაო პოზიციის განმარტება და ტრენინგის სახელმძღვანელო მდებარის პირველი და მრეწველთა ყოველდღიურად იცავს სახელმძღვანელო (toolbox talk)
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**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 სამშენებლო ნარჩენების საბოლოო განთავსების ნებართვა ან შესაბამისი კონტრაქტი ადეკვატური ორგანიზაციისგან.	<input type="checkbox"/>			ადეკვატური ორგანიზაციისგან არსებობს სამშენებლო ნარჩენების ტრანსპორტირება საბოლოო განთავსების ნებართვა.
2.2	The Contractor has a permit for final disposal of municipal waste. კონტრაქტორს მიღებული აქვს საყოფაცხოვრებო ნარჩენების საბოლოო განთავსების ნებართვა.	<input type="checkbox"/>			ადეკვატური ორგანიზაციისგან არსებობს საყოფაცხოვრებო ნარჩენების განთავსების ნებართვა.
2.3	The Contractor has executed the contract with the licensed organization on the hand-over and disposal of hazardous waste. კონტრაქტორს გაფორმებული აქვს სახიფათო ნარჩენების გადაცემისა და გატანის ხელშეკრულება დოკუმენტურად ორგანიზაციისგან.	<input type="checkbox"/>			საიტზე მოწყობილია სახიფათო ნარჩენების განთავსების დროებითი საწყობი.
2.4	The Contractor has a license for tree felling/კონტრაქტორს გააჩნია ლიცენზია ხის ჭრისთვის.	<input type="checkbox"/>		<input type="checkbox"/>	კონტრაქტორი არ აწარმოებს ხეების ჭრას

**3 Performance of civil works**

3.1	სამშენებლო ტერიტორიის სრულად შემოღობვა Adequate fencing of construction area from all sides	<input type="checkbox"/>			სრულად შემოღობილია
3.2	საეკითხი შესასვლელი კარის მოწყობა, სტანდარტული გამაფრთხილებელი და საინფორმაციო ნიშნები აღჭურვა Arrangement of lockable gate with standard warning and information signs	<input type="checkbox"/>			საეკითხი კარი მოწყობილია
3.3	სამშენებლო ტერიტორიაზე და გრძელვარსებულ სტანდარტული გამაფრთხილებელი და საინფორმაციო ნიშნების განთავსება Placement of standard warning and information signs at the perimeter and inside of construction area	<input type="checkbox"/>			სამშენებლო ტერიტორიაზე არსებობს გამაფრთხილებელი და საინფორმაციო ნიშნები
3.4	ღიად დატოვებული თხრილებზე და ქვებზე უსაფრთხოების ღიჯების, მარბრების და გამაფრთხილებელი ნიშნების განთავსება Installation of safety signs/tapes and trench side barriers around of open trenches	<input type="checkbox"/>			ღიად დატოვებულ თხრილებზე განთავსებულია უსაფრთხოების მონიღური ღიჯი გადასასვლელი, უსაფრთხოების ღიჯები და ნიშნები

4	3.5	1,5 მეტრზე მეტი სიღრმის ტრანშეხში კედლების განმტკიცება Strengthening of walls of the deep trenches (>1.5m) by boards	<input type="checkbox"/>		<input type="checkbox"/>	1,5 მეტრზე მეტი სიღრმის ტრანშეხში ითხოვს შესაბამისი წყების დაცვა
3.6	დასახლებულ ადგილებში ღიად დატოვებულ თხრილებზე დროებითი გადასასვლელის მოწყობა Installations of proper temporary wooden/metal walkways/planks across open trenches in settlement areas	<input type="checkbox"/>			<input type="checkbox"/>	დასახლებულ ადგილებში ღიად დატოვებული თხრილები არ არის
3.7	სამშენებლო ტერიტორიაზე, სამუშაოების ზონიში არსებული ხეების შემორჩენა (დაზიანების თავიდან აცილების მიზნით) Protect all trees nearby construction zone to avoid its damage	<input type="checkbox"/>				თხრილის ტერიტორიაზე ხეები დაცულია შემორჩენილია დაზიანებისგან და აღინიშნულია შესაბამისი გამაფრთხილებელი ნიშნებით.

3.8	ქვსკვადის დროს, წადავოს წაყოფიერი (დაახლოებით 20-30 სმ სისქის) ფენის მოხსნა და განცალკევებულად გროვებად შენახვა Removal of top soil (about 30 cm depth) and separately storing in appropriate place	<input type="checkbox"/>			<input type="checkbox"/>	ამ დროისთვის ქვსკვადია არ არის საიტზე
3.9	სამშენებლო ნარჩენების და ჭარბი ნარჩენი გრუნტის დროული გატანა/განთავსება Timely removal/disposal of construction waste and surplus waste soil	<input type="checkbox"/>		<input type="checkbox"/>		ამ ეტაპზე საიტზე არის განთავსებული ჭარბი ნარჩენი გრუნტი , და ხდება მისი ეტაპობრივად ექსპორტი.
3.10	სამშენებლო ტერიტორიის დამის სათანადო განათვა Provide adequate lighting of construction territory	<input type="checkbox"/>				სამშენებლო ტერიტორია განათებულია მთელ პერიმეტრზე
3.11	სამშენებლო ტერიტორიის შესაბამისად მოწყობა მასალების და მოწყობილობების და დანადგარების ორგანიზებული განთავსება (საჭიროების შემთხვევაში) Proper arrangement of construction site and segregation/storing of construction materials/equipment (bring the material when required)	<input type="checkbox"/>			<input type="checkbox"/>	ტერიტორიაზე არსებობს მასალებისა და მოწყობილობების განთავსებული ადგილები
3.12	სამშენებლო ტერიტორიაზე საწყობის და საბოლოო მასალების დაღვრის შედეგების სალიკვიდაციო ნარჩენების (ქვიშა, სახერხი, სივრცე ზომის ავიზი და სხვა) ხელმისაწვდომობა Availability of proper fuel/oil spill response items (sand, sawdust, special containers) at the construction site	<input type="checkbox"/>				ტერიტორიაზე ხელმისაწვდომია ქვიშა სახერხი ავიზი და სხვა.
3.13	საწყობის და საბოლოო მასალების კონტეინერების განთავსება მხოლოდ სპეციალურ გადამზარულ ადგილებში Allocation of fuel and lubricants containers at the special dedicated place (with roofing and concrete flooring)	<input type="checkbox"/>				ინახება სპეციალურ გამოყოფილ გადამზარულ შემორჩენილ ნივთების მოწყობილ ფილაზე. სად განთავსებულია ექსპლემპონი( ABCE კატეგორიის)



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3.14	სამშენებლო ტერიტორიაზე საყოფაცხოვრებო ნარჩენებისთვის თავსახურაში 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")	<input type="checkbox"/>			თავსახურაში კონტეინერები განთავსებულია ობიექტის გამოყოფილ პერიმეტრზე, შესაბამისი წარწერებით და მარკირებით.
3.15	სამშენებლო ტერიტორიაზე სახიფათო ნარჩენებისთვის თავსახურაში 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")	<input type="checkbox"/>			ობიექტის ტერიტორიაზე არის სპეციალური ნარჩენების კონტეინერი, და შესაბამისი წარწერა.
3.16	სამშენებლო ტერიტორიაზე ან მის გარე 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)	<input type="checkbox"/>			ობიექტის ტერიტორიაზე მოწყობილია პარკირების ადეკვატური
3.17	სამშენებლო მასალების და ნარჩენების ტრანსპორტირების დროს სპეციალური საცალო საფარი (ბრუნქტული ტექსტილი/ფილა)	<input type="checkbox"/>			საცალო საფარი იხურება ბრუნქტული
<b>აღჭურვა</b> Use tarpaulins cover during materials transportation					
3.18	საქობიდან გამომდინარე მტვრის წარმოქმნის პრევენცია Dust generation prevention activities (where needed)	<input type="checkbox"/>			საიტი მოხრეშულია ქვის ღორღით მიმდინარეობს მოწყვეტილი მასალის ამოღება.
3.19	მუშების და ინჟინერ-ტექნიკური პერსონალის მერ ინდივიდუალური დაცვის საშუალებების (ჩაფხუტი, კალოტი, ხელთათმანი, ჩექმები, დამცავი სათვალე და სხვა) სრულად გამოყენება Ensure that all workers are provided with and use appropriate Personal Protective Equipment - helmets, hand gloves, boots, masks, safety belts	<input type="checkbox"/>			მუშები ინჟინერ-ტექნიკური პერსონალი და ვიზიტორები სრულიად გამოიყენებენ ინდივიდუალური დაცვის საშუალებებს
3.20	სიმაღლეზე მუშაობის დროს სპეციალური დამცავი აღჭურვალობის გამოყენება Use of special safety equipment during working at heights	<input type="checkbox"/>			გამოიყენება სპეციალური დამცავი უსაფრთხოების ქანაზი
3.21	სამშენებლო ტერიტორიის მუდმივად დალაგება და დასუფთავება Regularly cleaning of construction territory	<input type="checkbox"/>			მიმდინარეობს საიტის მუდმივი მოვალეფერება ინჟინერ-ტექნიკური პერსონალის მერ დალაგება და დასუფთავებაზე.
<b>4 Monitoring Measurements</b>					

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4.1	Monitoring measurement data (air, water, soil, erosion, noise, dust, vibration, etc.) წყლის, ჰაერის, ვიბრაციის, ეროზიის, ხმაურის, მტვრის და წივადგის მონაცემების გაზომვების მონიტორინგი.	<input type="checkbox"/>			მონიტორინგის განხორციელება ხდება სხვაგვარად მონიტორინგის გეგმის შესაბამისად (კვარტალური, სამ თვეში ერთხელ) შემდეგი მონიტორინგის ჩატარდება მარტის ზოლის.
<b>5 Top Soil Protection</b>					
5.1	Topsoil is stripped and stored according to standard procedures and used further for landscaping and reinstatement. წივადგის ბოსტნულები ფენის დაცვა	<input type="checkbox"/>			წივადგის ბოსტნულები ფენის დაცვა, ექსპლუატაცია არ მიმდინარეობს საიტზე
<b>6 Safety Measures</b>					
6.1	The workers use all personal safety equipment required for individual technological processes (hard hats, gloves, respirators, glasses, etc.) მუშახელი იყენებს ადეკვატურ ტექნოლოგიური პროცესებისათვის პერსონალურ დამცავ საშუალებებს (ჩაფხუტი, ხელთათმანი, რესპირატორები, სათვალეები და ა.შ.)	<input type="checkbox"/>			გამოიყენება მტვრის დამცავი რესპირატორი, ყურის დამცავი საშუალებები, უსაფრთხოების დამცავი სათვალე.
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 განთავსებულია ხანძარსაწინააღმდეგო და სასწრაფო სამედიცინო დახმარების სახაზის ნაკრები, საიტი შემოღობილია, განათება დამონტაჟებულია, საინჟინერო დაფენისაბრები გაკრულია და სხვ...	<input type="checkbox"/>			საიტი შემოღობილია, განათება დამონტაჟებულია, ხანძარსაწინააღმდეგო და სასწრაფო სამედიცინო დახმარების სახაზის ნაკრები მოწყობილია.
<b>7 Works Completion</b>					
7.1	After completion of main works, the site undergoes final cleanup, harmonization with outward landscape and landscaping. ძირითად სამუშაოთა დასრულებისას წარმოებს ობიექტის საბოლოო დასუფთავება, გარე ლანდშაფტთან კარმონირება და გაშენება.	<input type="checkbox"/>			შესრულდება სამშენებლო სამუშაოების დასრულების შემდეგ
7.2	After completion of the operations in the quarry or its certain section, the idle material is backfilled, compacted, terraced and harmonized with the landscape. კარიერის ან მისი ცალკეული უბნის ექსპლუატაციის დასრულებისას წარმოებს ფუჭი მასალის უკუბრუნება, კომპაქტირება, ტერასირება, და ლანდშაფტთან კარმონირება.	<input type="checkbox"/>			შესრულდება სამშენებლო სამუშაოების დასრულების შემდეგ
7.3	Final Post Construction Environmental Audit/monitoring is conducted and Final Environmental Audit Report is prepared /საბოლოო გარემოს დაცვის მონიტორინგის ფინალური აუდიტის ჩატარებულია და საბოლოო გარემოსდაცვის აუდიტის ანგარიში მომზადებულია.	<input type="checkbox"/>			შესრულდება სამშენებლო სამუშაოების დასრულების შემდეგ
					შესრულდება სამშენებლო სამუშაოების დასრულების შემდეგ

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შენიშვნა/Comment: მიმდინარეობს საიტზე სახმელი წყლის შემოვანიითი სამუშაოები.

შესახამისი ფოტომასალა/Photo materials:



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## ANNEX G: Corrective Action Plan

(A) Corrective Action Plan developed by contractor "DAGI" under TBI-01 project

### CORRECTIVE ACTION PLAN



Mission notes  
27 -30 January 2018

**I2749:** usiip, tranche 1 – construction of uwscg office building

ADB recommended cc to construct concrete protective wall at the east part of the territory to avoid damaging of inhabitants living at nearby apartment buildings (fig. 1)

(Fig. 1)



For safety the east part of the territory to avoid damaging of inhabitants living at nearby apartment buildings (fig. 2)

Sample: rock fall protection (fig. 2)






After cutting for the construction NOUWSCG access road, on the rights side there is a danger of the fallen tree, that the tree did not fall, the tree was connected with ropes to the ground by anker (fig.3)  
Trees protection (fig.3)



# ANNEX H: Near Misses Report

Near Misses: 06.02.2018

		Construction of New Office Building for United Water Supply Company of Georgia Tbilisi, Georgia									
<b>Near Miss Report</b>											
Nature of Near Miss (tick all applicable) <table style="width: 100%; border: none;"> <tr> <td><input checked="" type="checkbox"/> Personal Injury</td> <td><input type="checkbox"/> Disease / illness</td> <td><input checked="" type="checkbox"/> Property Damage</td> </tr> <tr> <td><input type="checkbox"/> Other</td> <td><input type="checkbox"/> Environment spill / release</td> <td><input type="checkbox"/> Dangerous occurrence X</td> </tr> </table>						<input checked="" type="checkbox"/> Personal Injury	<input type="checkbox"/> Disease / illness	<input checked="" type="checkbox"/> Property Damage	<input type="checkbox"/> Other	<input type="checkbox"/> Environment spill / release	<input type="checkbox"/> Dangerous occurrence X
<input checked="" type="checkbox"/> Personal Injury	<input type="checkbox"/> Disease / illness	<input checked="" type="checkbox"/> Property Damage									
<input type="checkbox"/> Other	<input type="checkbox"/> Environment spill / release	<input type="checkbox"/> Dangerous occurrence X									
Day of Near Miss	05.02.18.		Time of Near Miss	12:00:00 AM							
Exact location of Near Miss	Tbilisi street university№006/003 Construction of New Office United Water Supply Company of Georgia (NOUWSCG)										
Description of Near Miss ( Include details of operations & activities)	There is a danger of land collapse at the east part of the territory.										
Description of first aid / medical treatment											
Corrective / Preventive action taken or recommendation	For safety at the east part of the territory, we install wire netting gabion to stop rock falling.										
Do we have a safety manager on site	YES		ALEXANDER CHUMBURIDZE								
Where any of the above boxes are ticked as "Other" please describe below:											
Other:											
Reported By: ALEXANDER CHUMBURIDZE											
Name: ALEXANDER CHUMBURIDZE		Position: HSE MANAGER		Date:							
Circulation (on the day of the event)											
Original Project File:											
<input type="checkbox"/> X Project Manager <input type="checkbox"/> X Country Manager <input type="checkbox"/> X HS&E Manager											

Near Misses: 22.02.2018

 		Construction of New Office Building for United Water Supply Company of Georgia Tbilisi, Georgia									
<b>Near Miss Report</b>											
Nature of Near Miss (tick all applicable) <table style="width: 100%; border: none;"> <tr> <td><input checked="" type="checkbox"/> Personal Injury</td> <td><input type="checkbox"/> Disease / illness</td> <td><input type="checkbox"/> Property Damage</td> </tr> <tr> <td><input type="checkbox"/> Other</td> <td><input type="checkbox"/> Environment spill / release</td> <td><input checked="" type="checkbox"/> Dangerous occurrence X</td> </tr> </table>						<input checked="" type="checkbox"/> Personal Injury	<input type="checkbox"/> Disease / illness	<input type="checkbox"/> Property Damage	<input type="checkbox"/> Other	<input type="checkbox"/> Environment spill / release	<input checked="" type="checkbox"/> Dangerous occurrence X
<input checked="" type="checkbox"/> Personal Injury	<input type="checkbox"/> Disease / illness	<input type="checkbox"/> Property Damage									
<input type="checkbox"/> Other	<input type="checkbox"/> Environment spill / release	<input checked="" type="checkbox"/> Dangerous occurrence X									
Day of Near Miss	22.02.18.		Time of Near Miss	14:00:00 AM							
Exact location of Near Miss	Tbilisi street university №006/003 Construction of New Office United Water Supply Company of Georgia (NOUNWSCC)										
Description of Near Miss ( include details of operations & activities)	On the wooden material there are nails, which can damage the all personals on the site.										
Description of first aid / medical treatment											
Corrective / Preventive action taken or recommendation	Must be cleaned all wood materials or sealed separately storage.										
Do we have a safety manager on site	YES			ALEXANDER CHUMBURIDZE							
Where any of the above boxes are ticked as "Other" please describe below:											
Other:											
Reported By: ALEXANDER CHUMBURIDZE											
Name: ALEXANDER CHUMBURIDZE    Position: HSE MANAGER    Date:											
Circulation (on the day of the event)											
Original Project File:											
<input checked="" type="checkbox"/> X Project Manager <input checked="" type="checkbox"/> X Country Manager <input checked="" type="checkbox"/> X HS&E Manager											