

# Environmental Monitoring Report

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Semestral Report  
March 2017

## GEO: Urban Services Improvement Investment Program – Project 3

**Prepared by United Water Supply Company of Georgia, LLC, Government of Georgia for the Asian Development Bank.**

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# BI-ANNUAL ENVIRONMENTAL MONITORING REPORT

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*Project Number: 43405-023*

*July-December 2016*

*Loan Number 3078-GEO (SF)*

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

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

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December 2016

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## ABBREVIATIONS

<b>ADB</b>	Asian Development Bank
<b>DC</b>	Design Consultant
<b>DREP</b>	Division of Resettlement and Environmental Protection
<b>EA</b>	Executing Agency
<b>EARF</b>	Environmental Assessment and Review Framework
<b>EHS</b>	Environmental Health & Safety
<b>EIA</b>	Environmental Impact Assessment
<b>EIP</b>	Environmental Impact Permit
<b>EMP/ SSEMP</b>	Environmental Management Plan/ Site-Specific Environmental Management Plan
<b>ES/ SES</b>	Environmental Specialist/ Senior Environmental Specialist
<b>GoG</b>	Government of Georgia
<b>GRC</b>	Grievance Redress Committee
<b>GRM</b>	Grievance Redress Mechanism
<b>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>MoENRP</b>	Ministry of Environment and Natural Resources Protection
<b>MoRDI</b>	Ministry of Regional Development & Infrastructure
<b>NEA</b>	National Environmental Agency
<b>SC</b>	Supervision Consultant
<b>UWSCG</b>	United Water Supply Company of Georgia
<b>WSS</b>	Water Supply & Sewerage

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## 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 July-December 2016 time period.
2. The Urban Services Improvement Investment Program was developed as the Government's response to the lack of adequate and/or safe water supply, sewerage and sanitation in urban areas of Georgia. This is intended to optimize social and economic development in selected urban areas through improved urban water and sanitation services, and is financed by the ADB through its Multi-tranche Financing Facility. The Ministry of Regional Development and Infrastructure is the Executing Agency and the United Water Supply Company of Georgia, LLC is the Implementing Agency of the Investment Program. UWSCG is a 100% state-owned company.
3. The Investment Program will improve infrastructure through the development, design and implementation of a series of subprojects, each providing improvements in a particular sector (water supply and/or sewerage) in one town. Subprojects will rehabilitate existing infrastructure and/or create new and expanded infrastructure to meet the present and future demand. Water supply improvements will include source augmentation and head works, pumping systems, treatment facilities, transmission and distribution network; and, sewerage improvement works will include sewer network, pumping stations, main collectors and waste water treatment plants.
4. The Investment Program will improve the health of residents in the urban centers of Mestia, Anaklia, Kutaisi, Poti, Ureki, Zugdidi and Marneuli. The outcome of the Investment Program is improved WSS services in these urban centers.
5. Tranche 3 of the Investment Program includes:
  - Construction of Water Supply and Wastewater Network in Ureki / Phase 3 (URE-01);
  - Construction of Wastewater Treatment Plant in Ureki (URE-02);
  - Construction and Rehabilitation of Water Supply System in Kutaisi / Phase 2 (KUT-01)

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

6. **Construction of Water Supply and Wastewater Network in Ureki / Phase 3 (URE-01).** The project comprises of the construction of 1 water supply pumping station and 31 sewage pumping stations (Shekvetili - 18, Ureki - 13; construction of new reservoirs (2,000 m<sup>3</sup> x 3,000 m<sup>3</sup> and 1 x 1,200 m<sup>3</sup>); Distribution network - laying of approximately 70 km water supply pipelines (distribution network will be divided into 3 areas), laying of approximately 70 km sewage pipelines; installation of approximately 1,500 watermeters; Wells - drilling of 10 drinking water wells.
7. **Construction of Wastewater Treatment Plant in Ureki (URE-02).** The project comprises of the construction of new Wastewater Treatment Plant with the capacity of 6,570 m<sup>3</sup>/day.
8. **Construction and Rehabilitation of Water Supply System in Kutaisi / Phase 2 (KUT-01).** The project envisages construction of Kvitiri 973 m<sup>3</sup>/h capacity and Mukhrani 660 m<sup>3</sup>/h capacity pumping stations; Reservoirs - construction of Near East and Mukhrani reservoirs with the capacity of 9,000 m<sup>3</sup> (2x4,000+1,000). Distribution network - 332.1 km.

**B. Construction activities implemented during the reporting period (July-December 2016)**

**Construction activities and project progress during the reporting period (July-December 2016)**

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

**KUT-01**

Site	Water network
Works undertaken during Jul-Dec 2016	PE 100-pipes OD 50 - 14.51%
	PE 100-pipes OD 63 - 41.33%
	PE 100-pipes OD 75 - 28.74%
	PE 100-pipes OD 90 - 52.87%
	PE 100-pipes OD 110 - 29.20%
	PE 100-pipes OD 125 - 67.27%
	PE 100-pipes OD 140 - 40.79%
	PE 100-pipes OD 160 - 58.23%
	PE 100-pipes OD 180 - 10.27%
	PE 100-pipes OD 200 - 9.98%
	PE 100-pipes OD 225 - 24.56%
	PE 100-pipes OD 250 - 75.10%
	PE 100-pipes OD 280 - 13.57%
	PE 100-pipes OD 315 - 79.48%
	PE 100-pipes OD 355 - 78.60%
	PE 100-pipes OD 400 - 49.14%
	Concrete Surface - 4%

**URE-02**

Site	Effluent Pipe
Works undertaken during Jul-Dec 2016	Effluent collector – 99%
	Construction of WWTP – 60%

**URE-01**

Site URE-01	Water Mains Installation
<b>Works undertaken during Jul-Dec 2016</b>	13.775 km of PE 100 pipes OD 710, SDR 11 installed – 60.69%
<b>Site</b>	<b>Water network</b>
<b>Works undertaken during Jul-Dec 2016</b>	6.845 km of HDPE pipes DN 25-560 – 13.55%
<b>Site</b>	<b>Sewerage network</b>
<b>Works undertaken during Jul-Dec 2016</b>	5.296 km of PE 100 and corrugated pipes OD 110-500 mm, SDR 11 installed – 7.53%

<b>Site</b>	<b>Construction of Reservoir #1</b>
<b>Works undertaken during Jul-Dec 2016</b>	Excavation Works – 20%

## 1.2 Changes in Project Organization and Environmental Management Team

### Agencies Involved in Investment Program Implementation

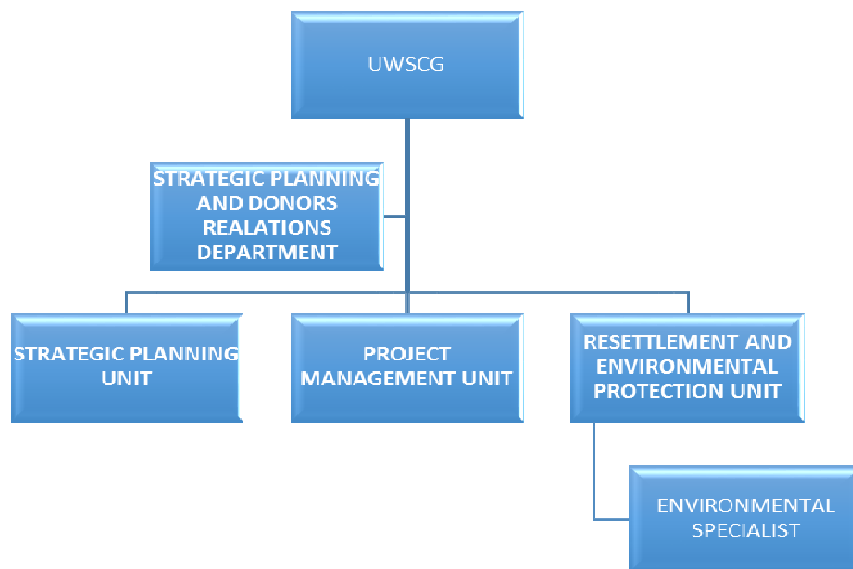
9. The following agencies are involved in implementing the Investment program: Ministry of Regional Development and Infrastructure (MoRDI) is the Executing Agency (EA) responsible for management, coordination and execution of all activities funded under the loan. MoRDI has overall responsibility for compliance with loan covenants.
10. 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. An Investment Program Management Office (IPMO) which is the Strategic Planning and Donors Relations Department (the former name of the Donors Relations Department was changed in July 2016) is responsible for the implementation of all Investment Program related functions. Resettlement and Environmental Protection Unit (UREP) is part of this Department. The IPMO coordinates construction of subprojects under USIIP, and ensures consistency of approach and performance.
11. In December 2016 the name of IPMO was changed and became an International Procurement and Donors Relations Department. A new Department of Environmental Protection, Resettlement and Permit (DEPRP) was established instead of UREP as well. DEPRP will include Unit of Construction Permission and will consist of five staff members. The new structural changes will enter into force from January 2017.
12. 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.
13. 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 EMPs and SEMP of subprojects, an Environmental Management Specialist (EMS) is employed by the SC/Eptisa. SC/EMS conducts routine observations and surveys, prepares quarterly environmental reports and submits these to UWSCG.
14. The Contractor has the following obligations:
  - to prepare SSEMPs;
  - to employ Environmental Consultant responsible for developing and implementing the construction phase SSEMPs and for providing the corresponding information to UWSCG and SC;
  - to develop, if required, a Spoil Disposal Plan and Construction Waste Management Plan
15. DC is responsible for developing and incorporation of mitigation measures in design and construction.
16. The environmental specialist (ES) is hired by UWSCG under the USIIP to assist and advise the Resettlement and Environmental Protection Unit (UREP) of UWSCG 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



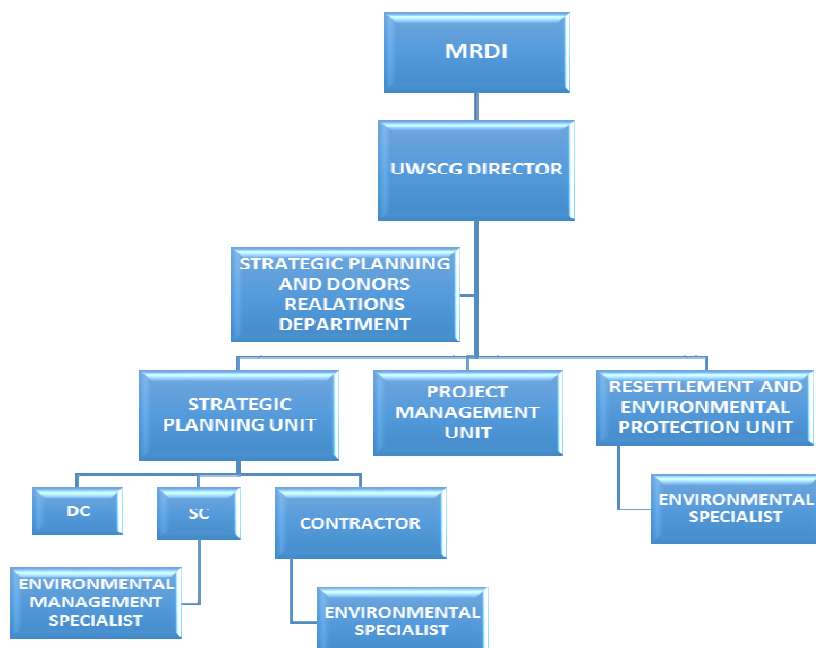
UREP in EARF implementation, in particular, reviewing IEE/EIA Reports and overseeing implementation of EMP/SSEMPs and in training and capacity-building activities. The ES prepares bi-annual and annual environmental monitoring reports and submits to ADB.

17. UREP is responsible for the implementation of mitigation and monitoring measures during construction and operation of subprojects under USIIP. Currently UREP is staffed with a Head of Division, who is responsible for both resettlement and environmental issues, and two Resettlement Specialists.
18. ADB is the donor financing the Investment Program. Environmental management organization is shown in Figure 1 and Figure 2.

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



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



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

19. Relationships with Contractors, as normal working relationships. At the working level, coordination of environmental issues has been satisfactory, the government agencies, UWSCG, consultants and contractors are in frequent communication and consultation.
20. Ministry of Regional Development and Infrastructure (MoRDI) is the Executing Agency (EA) responsible for oversee progress and provide guidance on the Investment Program implementation; convene regular meetings in consultation with the SC Chairperson and UWSCG; ensure compliance with Investment Program covenants.
21. Oversight of the USIIP with regards to environmental management is the responsibility of the environmental safeguards team, in particular UWSCG/DREP and the Environmental Specialist of USIIP.
22. The team has constant communication with the Supervision Consultant, Contractor, reviews/ comments all environmental reports submitted by DC, SC and contractors.
23. In fact the SSEMPs has been approved by UWSCG/UREP after the numerous discussions with the contractor until the specific situations of the site as well as mitigation measures under the site specific management plans are reflected.
24. SC is responsible for environmental capacity building, monitoring of implementation of SEMP and for developing quarterly reports. The Contractor has a full time Environmental Specialist who carries out day to day monitoring as submits a monthly progress reports.
25. ADB oversees project sites regularly and gives clear instructions for the project sites improvements with regard to environmental safeguards.
26. To resolve the observed environmental safeguard issues, the regular Environmental Meetings are organized with participation of UWSCG/IPMO/UREP, Eptisa, Contractors. During the meetings environmental issues and implementation of the mitigation measures are discussed.
27. A Grievance Redress Committee has been established within REG-01 in Kutaisi that will functional for KUT-01 project as well. GRM was established for URE-01 and URE-02 projects within the reporting period as well.
28. Contractor of KUT-01 project operated during the reporting period with the following sub-contractor:
  - LTD "Mshenebeli Service Center"
  - KBY Uluslararasi Insaat Ltd.Sti.
  - LTD "GES"
  - LLC "Dagi+"
29. Below are the list of permits and subcontractors of "SMK Ulusal Insaat Ve Ticaret A.S. (Turkey)" under the Kut-01 project
  - Kutaisi Municipality – contract was signed for disposal of Municipal Waste from project sites to the Kutaisi landfill
  - Permit issued to SMK by the Ministry of Environment and Natural Resources Protection of Georgia (Decree #i-902) – on Construction and Exploitation of the Asphalt plant
  - License issued to SMK by the National Environmental Agency of the MoENRP – for mineral extraction (gravel, ballast)
30. 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”.

**31.** Below are the list of subcontractors of Pfeiffer (Ure-02 project) for Disposal of Municipal Waste and extraction of minerals (gravel, ballast, etc)

- Ozurgeti Municipality - contract was signed for disposal of Municipal Waste from Ureki WWTP site to the Ozurgeti landfill
- Ltd “Imobiliary” – contract was signed for disposal of hazardous waste
- Georgian Solid Waste management Company for disposal of Solid Waste.

**32.** Project organization for the awarded contracts listed above is given in the table below:

**Table 2: List of contracts under T3**

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

## **PART II - ENVIRONMENTAL MONITORING**

**33.** Individual and joint on-site monitoring activities were conducted by Environmental Monitoring Specialist of SC and Environmental Specialist of UREP under USIIP on a regular basis, during the period July-December 2016. Unscheduled monitoring visits were carried out and non-compliance notes has been issued to the contractor as needed. Mitigation measures to reduce major environmental impacts have been instructed to contractors during the monitoring visits.

**34.** The monitoring activities included:

- The monitoring of compliance of construction activities under KUT-01 project sites to the overall project EMP/SSEMP;
- The monitoring of compliance of construction activities under the Ure-01 project sites to the overall project EMP/SSEMP;
- The monitoring of compliance of construction activities under the Ure-02 project sites to the overall project EMP/SSEMP;

35. Environmental Monitoring Specialist hired under the KUT-01, URE-01 and URE-02 subprojects conducted the day-to-day monitoring of the construction sites, developed the monthly monitoring reports and submitted to SC/Eptisa.
36. Environmental Monitoring Specialist of SC/Eptisa developed quarterly monitoring reports for UWSCG/UREP based on the monthly reports submitted by Contractor and based on environmental site inspection.
37. Environmental Specialist of USIIP performed monitoring of contractor's performance with the approved EMPs/SSEMPs, environmental standards and other environmental commitments of the contractor. ES developed bi-annual environmental monitoring reports and submitted to ADB based on the quarterly reports prepared by SC and monitoring results.
38. The USIIP's Environmental Impact Monitoring and Mitigation is carried out in accordance with the updated EMPs and Site-Specific Environmental Management Plans (SSEMPs) prepared by the Contractors. The construction activities affecting the environment are as follows:
- Excavation works
  - Removal of soil
  - Removal of vegetation
  - Backfilling of trenches
  - Reinstatement activities
39. 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. Kut-01, Ure-01 and Ure-02 are reported in this EMR.

**Table 3: Parametric Measurement Guidelines**

Parameters	Frequency & Location	Remarks
<b>Kut-01</b>		
Air Quality	Every 3 months Mukhnari Reservoir, Networks, Transmission Main	Watering site during excavation works to avoid dust spreading  Conduct measurements of Dusts Mg/m <sup>3</sup> ; CO Mg/m <sup>3</sup> ; NO <sub>2</sub> Mg/m <sup>3</sup> ; SO <sub>2</sub> Mg/m <sup>3</sup>
Noise	Every 3 months Mukhnari Reservoir, Networks, Transmission Main	Ensure that all equipment & vehicles used for construction activity are in good condition  Limiting working hours to 8 am – 6 pm
Impact on Flora and Fauna	Monthly during the site Inspection and audit	Avoid tree cutting In unavoidable cases, plant four trees of same species for each tree that is cut for construction

Cultural heritage Disturbance to cultural resources	Every time along the alignment Archaeological & Cultural Properties	<p>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.</p> <p>Calling in the state archaeological authority if a find is suspected, and taking any action they require to ensure its removal or protection.</p>
<b>Ure-01</b>		
Air Quality	Every 3 months Reservoir #1, Pumping Station, Well Fields, Networks, Transmission Main	<p>Watering site during excavation works to avoid dust spreading</p> <p>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></p>
Noise	Every 3 months Reservoir #1, Pumping Station, Well Fields, Networks, Transmission Main	<p>Ensure that all equipment &amp; vehicles used for construction activity are in good condition</p> <p>Limiting working hours to 8 am – 6 pm</p>
Impact on Flora and Fauna	Monthly during the site monitoring.	<p>Avoid tree cutting</p> <p>In unavoidable cases, plant four trees of same species for each tree that is cut for construction</p>
Cultural heritage Disturbance to cultural resources	Every time along the alignment Archaeological & Cultural Properties	<p>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.</p> <p>Calling in the state archaeological authority if a find is suspected, and taking any action they require to ensure its removal or protection.</p>

Ure-02		
Air Quality	Every 3 months WWTP Site, Nearest Residential House	Watering site during excavation works to avoid dust spreading  Conduct measurements of Dusts Mg/m <sup>3</sup> ; CO Mg/m <sup>3</sup> ; NO <sub>2</sub> Mg/m <sup>3</sup> ; SO <sub>2</sub> Mg/m <sup>3</sup>
Noise	Every 3 months WWTP Site, Nearest Residential House	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.

40. 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.

#### D. Monitoring Measurement Data

41. Environmental monitoring of dust, air condition, noise and vibration is performed as indicated in the relevant EMPs/SSEMPs (on the bi-annual basis).
42. In order to conduct measurements under the Kut-01 project, Contract was signed between the Contractor and the Ltd "Eco-Spectri". Monitoring measurements under Ure-01 and Ure-02 projects were conducted by the National Environmental Agency. All above mentioned measurements were carried out in November 2016 at various construction sites in Kutaisi and Ureki.
43. The parameters measured for the monitoring data at the construction sites are as follows: dust, carbon monoxide, nitrogen dioxide, sulfur dioxide, vibration and noise.

44. The National Environmental Standard (Maximum Permissible Level) for Noise level is regulated by the Decree No. 297/N "On Approval of Environmental Quality Norms" (August 16, 2001 of the Ministry of Labor, Health and Social Affairs).

45. Noise impacts should not exceed the levels presented in Table 3, or result in a maximum increase in background levels of 3 dB at the nearest receptor location off-site.

**Table 4: Noise Level Guidelines**

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

46. Location and data of measured parameters are provided in Annex A. The next monitoring measurements will be conducted in September 2016 and results will be reflected in the next EMRs as it defines in EMP/SSEMP.

**Table 5: Monitoring measurements under KUT-01, URE-02 and URE-01**

**Kut-01**

Annex 1 Results of quality measurements

Place of Measurement	Coordinates	Dust Mg/m <sup>3</sup>		CO Mg/m <sup>3</sup>		NO <sub>2</sub> Mg/m <sup>3</sup>		SO <sub>2</sub> Mg/m <sup>3</sup>		Noise db		Radiation mR/h		Vibro-acceleration m/sec	
		Standard	Results	Standard	Results	Standard	Results	Standard	Results	Standard	Results	Standard	Results	Standard	Results
Asatiani, street (point 1)	42153104 N 42415219 E	0.5	≥0.1	5.0	1.2	0.2	≥0.01	0.5	≥0.1	72	68	30	12	4.0	1.4
Asatiani street (point 2)	42153070 N 42415618 E		≥0.1		1.1		0.01		≥0.1		69		13		1.3
Asatiani Street (point 3)	422153248 N 42410019 E		≥0.1		1.2		0.01		≥0.1		68		11		1.4
Kukhianidze street	42145651 N 42414789 E		≥0.1		0.9		0.008		≥0.1		64		8		0.9
Sachkhere street	42133717 N 42403634 E		≥0.1		0.6		0.002		≥0.1		70		9		0.8
GviniaShvili street	42141474 N 42492926 E		≥0.1		0.3		0.003		≥0.1		68		10		0.8

Irakli Kavidadze  
Principal Auditor of EMS systems  
Ltd "Eco-Spectri"

*Kavidadze*



**URE-02**

N	Place of measurement	Coordinates	Results				
			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 db
	National Environmental Standard (Maximum		0,5	5,0	0,2	0,5	70



	Permissible Level)						
1.	Ureki, WWTP construction site	X 0730237 Y 4650518	0.015	0.24	0,001	<0,1	62,2

## URE-01

Samplin place coordinates	Sample N	Noise DB	Concentration mg/m <sup>3</sup>					
			Saturated hydrocarbons	Carbon oxide CO	Nitrogen dioxide NO <sub>2</sub>	Dust	Sulfur dioxide SO <sub>2</sub>	Hydrogen sulfide H <sub>2</sub> S
Tsvermagala X 0731286 Y 4643708	1	40,6	0	024	<0,001	0,001	<0,1	<0,1
	2	66.4	<0.1	1.07	<0,001	0,002	<0,1	<0,1
	3	68.2	<0.1	0.93	0,008	0,004	<0,1	<0,1
	4	60.0	1	0,87	0,003	0,011	<0,1	<0,1
Laituri X 0734834 Y 4649812	1	40.1	0	0,15	<0,001	0,002	<0,1	<0,1
	2	60.0	<1	1,17	0,008	0,005	<0,1	<0,1
	3	59.2	<1	1.02	0.066	0.003	<0,1	<0,1
	4	64.4	<1	0.97	0.005	0.003	<0,1	<0,1
Shekvetili X0729536 4646583	1	69.7	<1	0,83	0,001	0,004	<0,1	<0,1
	2	73	1	1,21	0,007	0,005	<0,1	<0,1
	3	71,2	1	1,30	0,007	0,005	<0,1	<0,1
	4	74,9	1	0,53	0,006	0,051	<0,1	<0,1
Kaprovani X 0729313 Y 4650077	1	54,3	<1	0,03	0,001	0,007	<0,1	<0,1
	2	57,2	<1	0,13	0,001	0,06	<0,1	<0,1
	3	56,2	<1	0,12	0,001	0,03	<0,1	<0,1
	4	55,1	1	1,04	0,001	0,03	<0,1	<0,1

47. According to data received in June 2016 the obtained results did not exceed the National Environmental Standard (Maximum Permissible Level) of Dust, CO, NO<sub>2</sub>, SO<sub>2</sub> and Noise, therefore no additional mitigations are required. All measurement were carried out at day tile (15:00 – 17:00pm).

## PART III - ENVIRONMENTAL MANAGEMENT

### 3.1 The Environmental Management System, Site-Specific Environmental Management Plan (SSEMP), and Work Plans (July-December 2016)

#### SSEMPs prepared under URE-01, URE-02 and KUT-01 projects (January-June 2016)

48. SSEMP for Reservoir #1, under Ure-01 project was updated due to the changes of the location and capacity of the reservoir. SSEMP was prepared by Contractor, endorsed by SC and approved by UWSCG on November 2016 and reviewed/commented by the RETA Regional Environmental Consultant of ADB under RETA 8663 - Ms. Ketí Dgebuadze.
49. SSEMP for Godogani reservoir, under Kut-01 project is prepared by Contractor, endorsed by SC/Eptisa and approved by UWSCG in August 2016.
50. Status of Environmental management plans is summarized in the table below:

**Table 6:** Status of Environmental management plans



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

### 3.2 Site Inspections and Audit

51. Regular site monitoring visits were carried out during the reporting period by the Supervision Consultant Eptisa and PIU - UWSCG for Ure-01, Ure-02 and Kut-01 projects. Some monitoring visits were conducted jointly by the SC/EMS and ES of USIIP. During the field visits a number of EHS issues were noted and brought to the attention of the Environmental Consultant and the H&S manager of Kut-01 and Ure-01project. 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 Kut-01 and Ure-01projects.
52. Site inspection and audit during the reporting period have been carried out on: 12-13 July 2016, 15-16 September 2016, 28-30 September 2016, 9-10 November 2016 and 18-20 November 2016. The schedule of conducted monitoring and audit during the reporting period is presented in the Table 7 below.

**Table 7:** The schedule of conducted audits and monitoring during the reporting period

#	Kut-01, Ure-01 and Ure-02 Site visits	Organization	Date
1	Site audit	Environmental specialist of USIIP and Eptisa environmental specialists	12-13.07.2016
2	Site audit	Environmental specialist of USIIP and Eptisa environmental specialists	15-16.08. 2016
3	Site audit	Environmental specialist of USIIP and Eptisa environmental specialists	28-30.08. 2016

4	Site audit	Eptisa environmental specialists	9-10.11.2016
5	Site audit	Environmental specialist of USIIP and Eptisa environmental specialists	18-20.11. 2016

- 53.** 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).
- 54.** 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.

### 3.3 Non-Compliance Notices

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

- 55.** All corrective actions requested after the Monitoring of sites were mostly improved by contractor; however, there were some environmental issues that were not addressed adequately. During the course of the construction supervision in the previous six months of the works, two “Non-compliance notices” were issued by the environmental specialists of Eptisa and UWSCG to the contractor for Kut-01, one non-compliance notice for Ure-01 projects and one non-compliance notice for Ure-02 project (See Annex C).
- 56.** It should be mentioned that all permits, licenses and agreements are on place and available at camp site.

### 3.4 Corrective Action Plans

- 57.** For the purpose of resolving the observed issues, the corrective action plans have been developed by the contractor under Kut-01 project (see Annex G).
- 58.** The regular Environmental Meetings were also carried out with the participation of UWSCG/IPMO/UREP, 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 8:** Actions taken for implementation of mitigation measures under Kut-01, Ure-01 and Ure-02 projects by the end of December 2016

#### URE-01

Construction Site	Environmental Issues	Action taken
Ureki/Well Fields	Fuel/oil spill response items (sand, sawdust, special containers) should available	Completed
	Fencing of the site is to be established	Completed
	Topsoil should be managed according to the SSEMP	Partially Completed
	Machinery and equipment should be in standard technical condition (no leakage of fuel and lubricants)	Partially Completed
	All containers of fuel and lubricants should be	Partially Completed

Construction Site	Environmental Issues	Action taken
	placed in a special place with roofing	
	Bentonite waste should be managed according to SSEMP	Partially Completed
Ureki/Pumping Station	Proper place for Parking with relevant sign should be arranged	Completed
	All construction materials should be properly segregated and stored adequately	Completed
	Fuel/oil spill response items (sand, sawdust, special containers) should be equipped with relevant signs	Completed
	Machinery and equipment should be in standard technical condition (no leakage of fuel and lubricants)	Completed
	All workers (even personnel of subcontractor) should be equipped with complete PPE	Completed
	Site internally should be arranged properly and cleaned regularly	Completed
Ureki/Network	Enough and high visible safety signs/tapes and trench side barriers around of deep open trenches should be installed to avoid accident of population	Completed
	Use tarpaulins to cover during materials transportation	Not Completed
	Walls of the deep trenches (>1.5m) should be strengthened by boards to avoid landfall of the soil and accidents	Not Completed
	Accumulated waste soil should be removed from construction area and disposed in a proper place	Completed

### Kut-01

Construction Site	Environmental Issues	Action taken
<b>Kut-01</b>		
Kutaisi Network		
	Accumulated waste soil should be removed from construction area and disposed in a proper place	Completed (Corrective Action Plan, 18.11.2016, Annex G)
	Construction materials should be brought when needed to avoid its long time disposal in the streets and disturbance of residents and businesses	Completed (Corrective Action Plan, 18.11.2016, Annex G)
	Protect trees being nearby to construction zone to avoid its damage	Partially Completed
	Construction activities information signs should be installed at each construction segment	Completed (Corrective Action Plan, 18.11.2016, Annex G)
	Enough and high visible safety signs/tapes and trench side barriers around of deep open trenches	Completed (Corrective Action Plan, 18.11.2016,

Construction Site	Environmental Issues	Action taken
	should be installed to avoid accident of population	Annex G)
	Special blinking signs or flag men where necessary should be provided when passing streets to avoid disturbance of car movements	Not Completed
	Enough and proper wooden/metal walkways/planks across open trenches should be installed	Completed (Corrective Action Plan, 18.11.2016, Annex G)
<b>Mukhrani Reservoir</b>		
	Trees at the construction site should be fenced properly and protected to avoid its damage	Completed (Corrective Action Plan, 18.11.2016, Annex G)
	High visible safety signs/tapes and trench side barriers should be installed around of excavation of reservoir	Completed (Corrective Action Plan, 18.11.2016, Annex G)
	Walls of the deep trenches (>1.5m) should be strengthened by boards to avoid landfall of the soil and accidents	Not Completed
	Site should be fenced properly from all sides to avoid entrance of cattle/animals	Completed (Corrective Action Plan, 18.11.2016, Annex G)
	Proper fuel/oil spill response items (sand, sawdust, special containers) should be available at the site	Completed (Corrective Action Plan, 18.11.2016, Annex G)
	Surplus/accumulated waste soil should be taken away for its final disposal	Completed (Corrective Action Plan, 18.11.2016, Annex G)
	All construction materials should be properly segregated and stored adequately	Completed (Corrective Action Plan, 18.11.2016, Annex G)
	All workers (even personnel of subcontractor) should be equipped with complete PPE	Completed (Corrective Action Plan, 18.11.2016, Annex G)
	Site internally should be arranged properly and cleaned regularly	Completed (Corrective Action Plan, 18.11.2016, Annex G)

## Ure-02

Construction Site	Environmental Issues	Action taken
<b>Ure-02</b>		
	Enough safety signs/tapes and trench side barriers around of deep trench should be installed	Completed
	Proper place for Parking should be arranged. If necessary should be arranged several parking areas with relevant signs. Transport should be parked only at the parking area	Completed
	All construction materials should be properly	Completed

Construction Site	Environmental Issues	Action taken
	segregated and stored adequately	
	All containers of fuel and lubricants should be placed in a special place	Completed
	“Household Waste” containers should be installed in proper place with relevant sign	Completed
	PPE equipment should be used always and completely by all workers (even personnel of subcontractor)	Completed
	During of high-altitude works special equipment should be used	Completed
	Site internally should be arranged properly and cleaned regularly	Completed
	Enough safety signs/tapes and trench side barriers around of deep trench should be installed	Completed

59. These issues were captured in project photos and are shown in Annex B.

60. Annual Environmental Compliance Safeguard Review Mission was carried out by ADB on 29-30 September 2016 to review environmental safeguards compliance of USIIP projects.

### 3.5 Actions taken to reflect the findings of ADB mission carried out on 29-30 September 2016

**Table 9: Status of findings of ADB mission carried out on 29-30 September 2016**

Project	Specific Issues	Deadline for submission/Implementation	Implementation Status
Construction and Rehabilitation of Water Supply System in Kutaisi / Phase 2 (KUT-01) – USIIP, T3			
	Rehabilitation activities of water supply pipes are on-going in Kutaisi. Construction of reservoirs in Mukhrani and Godogani has not been started yet. SSEMP for Construction of Mukhrani Pumping Station and Reservoir was prepared on 25 March and approved by SC and PIU. SSEMP for Godogani reservoir was prepared in August 2016 by the CC and approved by PIU (both SSEMPs were reviewed/commented by the NES).	August 2016	Completed. SSEMP for Godogani Reservoir is prepared and approved in August 2016.
	Company Waste Management Plan (CWMP) is under preparation and will be submitted to the MoENRP for approval till	December 2016	Completed. Draft Waste Management Plan is Submitted to RETA Regional Environmental

Project	Specific Issues	Deadline for submission/Implementation	Implementation Status
	December 2016 according to the new Waste Management Code of Georgia (accepted in January 2015). It was agreed that after preparation of first draft of CWMP by CC, RETA Regional Environmental Consultant will review and provide comments for further improvement of the submitted document.		Consultant in December 2016
Construction of Wastewater Treatment Plant in Ureki (URE-02) – USIIP, T3			
	Company Waste Management Plan (CWMP) is under preparation and will be submitted to the MoENRP for approval till December 2016 according to the new Waste Management Code of Georgia (accepted in January 2015). It was agreed that after preparation of first draft of CWMP by CC, RETA Regional Environmental Consultant will review and provide comments for further improvement of the submitted document.	December 2016	Completed. Draft Waste Management Plan is Submitted to RETA Regional Environmental Consultant in December 2016
	Baseline measurements for air, water, noise were performed on 19 February 2016 by the CC. Monitoring of measurements for air, water, noise is performed quarterly.	November 2016.	Completed in November 2016
Construction of Water Supply and Wastewater Network in Ureki / Phase 3 – USIIP, T3			
Ure-01	SSEMPs for pumping station, reservoirs 1 and 2 and 10 well fields were prepared and approved by SC and PIU (reviewed and commented by the NES). SSEMP for reservoir 1 will be updated due to the change of the construction territory and SSEMP for reservoir 3 will be prepared after selection of final territory.		Completed. Approved by UWSCG in November 2016
	All documents are available at camp site except agreement with Municipal Waste Disposal Agency and filled checklists of CC environmental		Completed in November 2016

Project	Specific Issues	Deadline for submission/Implementation	Implementation Status
	specialist.		
	Company Waste Management Plan (CWMP) is under preparation and will be submitted to the MoENRP for approval till December 2016 according to the new Waste Management Code of Georgia (accepted in January 2015). It was agreed that after preparation of first draft of CWMP by CC, RETA Regional Environmental Consultant will review and provide comments for further improvement of the submitted document.	December 2016	Completed. Draft Waste Management Plan is Submitted to RETA Regional Environmental Consultant in December 2016

### **Actions taken regarding the action plan of the EMR January-June 2016:**

#### **Action Plan for the next period**

61. SSEMP for Res-01 is updated and approved by UWSCG. Currently the construction of Res#3 is under discussion. SSEMP for Res-03 will be prepared as soon as final decision is made by UWSCG and SC/Eptisa (January-February 2017).
62. Monitoring of environmental quality under Kut-01, Ure-02 and Ure-01 projects were conducted in October 2016 with particular reference to dust, air quality, vibration and noise.

#### **3.6 Consultations and Complaints**

63. During the reporting period public awareness activities in Kutaisi focused on meetings with local population, local self-governance representatives and NGO sector to find out main challenges and issues on which local population would like to receive more information. Apart from the public consultation meeting a special public opinion survey was implemented. Results of the public opinion survey is presented in Annex F.

#### **Consultation meetings with the local population**

64. On December 9, Eptisa local PA consultant together with the UWSCG representatives met with local municipality, NGO sector and local population in Ureki. The aim of the consultation meeting was to raise the awareness on a project and discuss PA activities that Eptisa plans to implement in Ureki in partnership with UWSCG local office. Also to identify main issues and concerns of the population and topic on which they would like to receive more information.
65. The first part of the meeting was dedicated to the project presentation. Main activities that Eptisa PA consultants implement in cooperation with the UWSCG PR department to raise the awareness of population on the project and safe and wise water consumption were also presented and discussed. Presentations were followed by Q and A session. Overall the meeting was very constructive and both representatives of the local population and local municipality were actively engaged in discussion. At the end of the meeting local self-governance representatives expressed interest to support the door to door campaign in



Ureki by assigning their volunteers who can support Eptisa and UWSCG representatives in implementation of the door to door campaign. It was agreed that prior to the commence of the door to door in Ureki Eptisa PA consultants will train local municipality volunteers who express interest to carry out the door to door campaign.

66. At the end of the meeting the representatives of the local population and municipality offered recommendations and identified some challenges that need to be taken care in order to start the Public Awareness campaign for URE-01 and URE-02 projects.

**Recommendations identified during the meeting included:**

67. The local self-government representatives asked the construction company and Eptisa representatives to take into consideration that it would be important if the water supply system will also be constructed for the population living near the Tsvermagala reservoir. Population near the reservoir is distracted by noise without having any benefits from the rehabilitation as process does not envisage water supply system rehabilitation for these settlements.
68. As UWSCG does not have a service center in Ureki representatives of the local NGOs asked Eptisa local PA consultant to serve as a liaison and regularly update them about the project progress and activities. Also facilitate discussions and consultation meetings.

**The following challenges were also identified during the meeting:**

69. Number of exact beneficiaries of the project is not identified. Therefore the UWSCG representatives were asked to seek for this information from the company that provides electricity to the region.
70. The current project in Ureki envisages water and sewage rehabilitation for private houses only. But apart from the houses there are also 7 apartment buildings in Ureki. Some of them have an old individual sewage system in place but these systems in most cases are outdated. Local population asked UWSCG representatives to include these apartment buildings in the project as well.
71. Local population is also interested what will be the tariff of the water consumption for those sole proprietors who rent out rooms for tourists during summer period.

**Public Opinion Survey**

72. During the reporting period Eptisa PA consultants implemented a small public opinion survey in Ureki to find out how well the effected population was informed about the project and what were the main issues, topics that the population was interested to receive more information on. Also how, through which communication channels, they would like to receive this information.
73. Special questioner was developed for the survey based on which 30 households were interviewed.
74. As a result of the survey it was identified that the local population is not sufficiently informed about the project but the interest towards the project is very high therefore population is eager to receive more information about the water supply and sanitation rehabilitation project. The water supply and sewage system rehabilitation project is very important for the population of Ureki, Shekvetili and Kaprovana as these are touristic areas and most of the households are either owners of hotels or rent houses or flats during the summer season.
75. According the survey the most important issues on which population would like to receive more information are: project timelines, water tariffs, quality of the potable water, and connection process to the main pipeline, sanitation and wise water consumption.



76. Most of the surveyed households would prefer to receive information about the project through information brochures, door to door campaign and consultation meetings.
77. Upcoming public awareness activities in for URE-01 and URE-02 project will be planned based on the survey results and in coordination with UWSCG and local self-governance.

#### **Grievance Committee**

78. During the reporting period a grievance committee was created for URE-01 and URE-02 projects consisting of representatives of UWSG, local self-governance, civil society and local households. In parallel UWSCG office in Ozurgeti (that covers Ureki region) opened special registry of grievances for URE-01 and URE-02 projects.

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

79. 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 are provided in Annex E.
80. During the reporting period up to 20 complains have been received under Kut-01, Ure-01 and Ure-02 projects. These complaints were related to the problems concerning the water supply (no water supply or limited water supply) due to the damages on the water pipes, rehabilitation of roads/problems concerning damaged infrastructure, dropping of inert materials or construction waste on the street. All complains were resolved on the first level, by involving UWSCG/service center, contractor and supervision company.

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

#### **4.1 Conclusions and recommendations**

81. As presented in this report, Tranche-3 of this Investment Program is being implemented in compliance with the ADB Safeguards Policy Statement, 2009, National Legislation and overall EARF.
82. Necessary instructions have been given to the Contractor by UWSCG and SC to follow the EMP's and SSEMP's requirements for Kut-01, Ure-01 and Ure-02 projects.
83. More detailed recommendations are with indication of the entities responsible for their implementation are provided in the table below:

**Table 10: Recommendations to address Environmental Issues**

<b>Recommendations KUT-01 Kutaisi: Networks and Mukhrani Reservoir</b>	<b>Responsible Party</b>
Walls of the deep trenches (>1.5m) should be strengthened by boards to avoid landfall of the soil and accidents	Contractor
Prepare Waste Management Plan and submit to the MoENRP by the end of December 2016	Contractor, with support of Supervision Company and UWSCG
<b>Ure-01</b>	
Use tarpaulins to cover during materials transportation	Contractor

Walls of the deep trenches (>1.5m) should be strengthened by boards to avoid landfall of the soil and accidents	Contractor
Prepare Waste Management Plan and submit to the MoENRP by the end of December 2016	Contractor, with support of Supervision Company and UWSCG
<b>Kut-01</b>	
Prepare Waste Management Plan and submit to the MoENRP by the end of December 2016	Contractor, with support of Supervision Company and UWSCG

#### 4.2 Action Plan for the next period

84. Implement Tranche-3 in compliance with the ADB Safeguards Policy Statement, 2009, National Legislation and overall EARF.
85. Conduct monitoring of environmental quality under Kut-01, Ure-01 and Ure-02 projects at each construction site in with particular reference to dust, noise and vibration. The specific plan for measurement is as follows:

**Table 11:** Conduct monitoring of environmental quality under Kut-01, Ure-01 and Ure-02 projects at each site

Parameters	Quarterly measurement
Dust	February 2017
Vibration	February 2017
Carbon monoxide	February 2017
Nitrogen dioxide	February 2017
Sulfur dioxide	February 2017
Noise	February 2017

## ANNEXES:



### ANNEX A: MONITORING DATA

Kut-01: Monitoring data, November 15 2016.

Annex 1 Results of quality measurements

Plaice of Measurement	Coordinates	Dust Mg/m <sup>3</sup>		CO Mg/m <sup>3</sup>		NO <sub>2</sub> Mg/m <sup>3</sup>		SO <sub>2</sub> Mg/m <sup>3</sup>		Noise db		Radiation mR/h		Vibro-acceleration m/sek	
		Standard	Results	Standard	Results	Standard	Results	Standard	Results	Standard	Results	Standard	Results	Standard	Results
Asatiani, street (point1)	42153104 N 42415219 E	0.5	≥0.1	5.0	1.2	0.2	≥0.01	0.5	≥0.1	72	68	30	12	4.0	1.4
Asatiani street (point 2)	42153070 N 42415618 E		≥0.1		1.1		0.01		≥0.1		69		13		1.3
Asatiani Street (point 3)	422153248 N 42410019 E		≥0.1		1.2		0.01		≥0.1		68		11		1.4
Kukhianidze street	42145651 N 42414789 E		≥0.1		0.9		0.008		≥0.1		64		8		0.9
Sachkhere street	42133717 N 42403634 E		≥0.1		0.6		0.002		≥0.1		70		9		0.8
GviniaShvili street	42141474 N 42492926 E		≥0.1		0.3		0.003		≥0.1		68		10		0.8

Irakli Kavidadze  
Principal Auditor of EMS systems  
Ltd "Eco-Spectri"

## Ure-02





Concentration of harmful substances in atmospheric 15.11.2016					
Samplin place coordinates	Noise DB	Dust mg/m <sup>3</sup>	Sulfur dioxide SO <sub>2</sub> mg/m <sup>3</sup>	Nitrogen dioxide NO <sub>2</sub> mg/m <sup>3</sup>	Carbon oxide CO mg/m <sup>3</sup>
Anaklia X 0713640 Y 4697365	53.7	0.363	<0.1	0.001	0.87
Enterprise area X 0714137 Y 4697757	45.2	0.031	<0.1	<0.001	0.63
Ureki X 0730237 Y 4650518	62.2	0.015	<0.1	0.001	0.24

Executors:  
Main specialist  
Main specialist  
Specialist

Agreed:  
Head Environmental Pollution  
Monitoring Department

O. Kenia  
S. Khatsava  
G. Morgoshia

M. Arabidze

## Ure-01

**Concentration of harmful substances in atmospheric**  
**15.11.2016**

Sampling place coordinates	Sample №	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
Tsvermagala X 0731286 Y 4643708	1	40,6	0	024	<0,001	0,001	<0,1	<0,1
	2	66,4	<0,1	1,07	<0,001	0,002	<0,1	<0,1
	3	68,2	<0,1	0,93	0,008	0,004	<0,1	<0,1
	4	60,0	1	0,87	0,003	0,011	<0,1	<0,1
Laituri X 0734834 Y 4649812	1	40,1	0	0,15	<0,001	0,002	<0,1	<0,1
	2	60,0	<1	1,17	0,008	0,005	<0,1	<0,1
	3	59,2	<1	1,02	0,066	0,003	<0,1	<0,1
	4	64,4	<1	0,97	0,005	0,003	<0,1	<0,1
Shekvetili X0729536 4646583	1	69,7	<1	0,83	0,001	0,004	<0,1	<0,1
	2	73	1	1,21	0,007	0,005	<0,1	<0,1
	3	71,2	1	1,30	0,007	0,005	<0,1	<0,1
	4	74,9	1	0,53	0,006	0,051	<0,1	<0,1
Kaprovani X 0729313 Y 4650077	1	54,3	<1	0,03	0,001	0,007	<0,1	<0,1
	2	57,2	<1	0,13	0,001	0,06	<0,1	<0,1
	3	56,2	<1	0,12	0,001	0,03	<0,1	<0,1
	4	55,1	1	1,04	0,001	0,03	<0,1	<0,1

**Executors:**  
Main specialist  
Main specialist  
Specialist

**Agreed:**  
Head Environmental Pollution  
Monitoring Department

*Review*  
O. Kenia  
S. Khatsava  
G. Morgoshia

M. Arabidze



## ANNEX B: PROJECT PHOTOS

### KUT – 01



**Kut-01:** Network

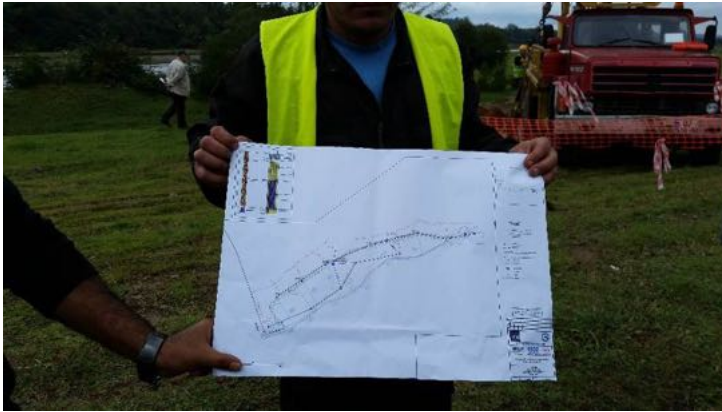


**Kut-01:** Mukhnari Reservoir

### Ure-01







**URE-01:** Well fields





**URE-01:** Pumping Station

**Ure-02**





**Ure-02:** WWTP project site



## ANNEX C: NON-COMPLIANCE NOTICES

### NON-COMPLIANCE NOTICE (21.04.2016 - 31.05.16) – KUT-01-01

#### Non-Compliance Notice

Project: USIIP	Non-compliance Notice UREKI
Contract No: URE-02	
Contractor: PFIEFFER	
Reference: JREKI – WWTP SITE	

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

#### NON-COMPLIANCE IN UREKI

##### JREKI WWTP SITE

- Enough safety signs/tapes and trench side barriers around of deep trench should be installed
- Proper place for Parking should be arranged. If necessary should be arranged several parking areas with relevant signs. Transport should be parked only at the parking area
- All construction materials should be properly segregated and stored adequately
- All containers of fuel and lubricants should be placed in a special place
- “Household Waste” containers should be installed in proper place with relevant sign
- PPE equipment should be used always and completely by all workers (even personnel of subcontractor)
- During of high-altitude works special equipment should be used
- Site internally should be arranged properly and cleaned regularly



### NON-COMPLIANCE NOTICE (22 February, 2016) – Ure-02

## Non-Compliance Notice

Project: USIP	Non-compliance Notice KUTAI
Contract No: KUT-01	
Contractor: SMK	
Reference: Kutaisi – MUKHNARI RESERVOIR	

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 KUTAI

#### Mukhnari Reservoir

- Trees at the construction site should be fenced properly and protected to avoid its damage
- High visible safety signs/tapes and trench side barriers should be installed around of excavation of reservoir
- Walls of the deep trenches (>1.5m) should be strengthened by boards to avoid landfall of the soil and accidents
- Site should be fenced properly from all sides to avoid entrance of cattle/animals
- Proper fuel/oil spill response items (sand, sawdust, special containers) should be available at the site
- Surplus/accumulated waste soil should be taken away for its final disposal
- All construction materials should be properly segregated and stored adequately
- All workers (even personnel of subcontractor) should be equipped with complete PPE
- Site internally should be arranged properly and cleaned regularly



## Non-Compliance Notice

Project: USIIP	<b>Non-compliance Notice</b>  <b>KUTAI SI</b>
Contract No: KUT-01	
Contractor: SMK	
Reference:  Kutaisi – NETWORK	
This notice is to advice 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 KUTAI SI</u></b>	
<b>NETWORK</b>	
<ul style="list-style-type: none"><li>- Accumulated waste soil should be removed from construction area and disposed in a proper place</li><li>- Construction materials should be brought when needed to avoid its long time disposal in the streets and disturbance of residents and businesses</li><li>- Protect trees being nearby to construction zone to avoid its damage</li><li>- Construction activities information signs should be installed at each construction segment</li><li>- Enough and high visible safety signs/tapes and trench side barriers around of deep open trenches should be installed to avoid accident of population</li><li>- Walls of the deep trenches (&gt;1.5m) should be strengthened by boards to avoid landfall of the soil and accidents</li><li>- Special blinking signs or flag men where necessary should be provided when passing streets to avoid disturbance of car movements</li><li>- Enough and proper wooden/metal walkways/planks across open trenches should be installed</li><li>- Resident houses nearby areas should be clean from construction materials to avoid disturbance of residents and businesses</li><li>- Use tarpaulins to cover during materials transportation</li><li>- Workers always should use complete PPE</li><li>- All transmission line construction segments should be cleaned/well organized on regular bases</li></ul>	





Asatiani st.



Asatiani st.



Asatiani st.



Asatiani st.



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Asatiani st.



St Luka st.



St Luka st.



St Luka st.



St Luka st.



Tamarashvili st.

Tamarashvili st.	Tamarashvili st.	Tamarashvili st.
All these conditions have to be remedied within five days (by the 20 November 2016) by the prime Contractor (SMK).		
Date of site visits: 09.11-10.11.16		
Irakli Legashvili EPTISA - Environment		

**Ure-01**

### Non-Compliance Notice

Project: USIIP	Non-compliance Notice  UREKI
Contract No: URE-01	
Contractor: PERI	
Reference:  UREKI - UREKI PAMPING STATION	
This notice is to advice you, the prime Contractor, on the referenced Contract, of the following notice on environmental measures to be implemented <b>urgently</b> .	
  <u>NON-COMPLIANCE IN UREKI</u>  <b>PAMPING STATION</b>  <ul style="list-style-type: none"><li>- Proper place for Parking with relevant sign should be arranged</li><li>- All construction materials should be properly segregated and stored adequately</li><li>- Fuel/oil spill response items (sand, sawdust, special containers) should be equipped with relevant signs</li><li>- Machinery and equipment should be in standard technical condition (no leakage of fuel and lubricants)</li><li>- Use tarpaulins to cover during materials transportation</li></ul>	



- All workers (even personnel of subcontractor) should be equipped with complete PPE
- Site internally should be arranged properly and cleaned regularly



All these conditions have to be remedied within five days (by the 25 September 2016) by the prime Contractor (Peri).

**Date of site visits: 15 - 16.09.16**

Irakli Legashvili

EPTISA - Environment


## Non-Compliance Notice

**Project: USIIP**

**Contract No: URE-01**

**Non-compliance Notice**

**UREKI**

Contractor: PERI	
Reference:  UREKI - WELLFIELD	
This notice is to advice you, the prime Contractor, on the referenced Contract, of the following notice on environmental measures to be implemented <b>urgently</b> .	
<p><b><u>NON-COMPLIANCE IN UREKI</u></b></p> <p><b>WELLFIELD</b></p> <ul style="list-style-type: none"> <li>- Fuel/oil spill response items (sand, sawdust, special containers) should available</li> <li>- Fencing of the site is to be established</li> <li>- Topsoil should be managed according to the SSEMP</li> <li>- Machinery and equipment should be in standard technical condition (no leakage of fuel and lubricants)</li> <li>- All containers of fuel and lubricants should be placed in a special place with roofing</li> <li>- Bentonite waste should be managed according to SSEMP</li> </ul> <div data-bbox="321 861 1425 1705">  </div>	
All these conditions have to be remedied within five days (by the 25 September 2016) by the prime Contractor (Peri).	
Date of site visits: 15 - 16.09.16	

Irakli Legashvili EPTISA - Environment	
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### Non-Compliance Notice

Project: USIIP	Non-compliance Notice  UREKI
Contract No: URE-01	
Contractor: PERI	
Reference:  UREKI – NETWORK, RESERVOIR	
This notice is to advice you, the prime Contractor, on the referenced Contract, of the following notice on environmental measures to be implemented <b>urgently</b> .	



## **NON-COMPLIANCE IN UREKI**

### **NETWORK**

- Protect trees to avoid its damage during transmission line construction
- Enough and high visible safety signs/tapes and trench side barriers around of deep open trenches should be installed to avoid accident of population
- Walls of the deep trenches (>1.5m) should be strengthened by boards to avoid landfall of the soil and accidents
- Accumulated waste soil should be removed from construction area and disposed in a proper place
- Use tarpaulins to cover during materials transportation
- Workers always should use complete PPE



### **RESERVOIR**

- Trees at the construction site should be protect to avoid its damage
- Site should be fenced from all sides and equipped with lockable gate with proper warning and information signs

- Proper warning and information signs should be arranged at the entrance, perimeter and inside of construction site
- Safety signs/tapes and trench side barriers should be installed around of excavation of reservoir
- Household Waste containers with relevant sign should be installed in proper place
- Hazardous Waste containers with relevant sign should be installed in proper place
- Workers always should use complete PPE
- Site internally should be arranged properly and cleaned regularly



All these conditions have to be remedied within five days (by the 20 November 2016) by the prime Contractor (Peri).

**Date of site visits: 09.11-10.11.16**

Irakli Legashvili

EPTISA - 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>Kut-01</b>			
Network	Accumulated waste soil should be removed from construction area and disposed in a proper place	Contractor developed corrective action plan to improve the situation	Contractor is instructed to keep the same standard
	Construction materials should be brought when needed to avoid its long time disposal in the streets and disturbance of residents and businesses	Contractor developed corrective action plan to improve the situation	Contractor is instructed to keep the same standard
	Protect trees being nearby to construction zone to avoid its damage	Contractor developed corrective action plan to improve the situation	Contractor is instructed to keep the same standard
	Construction activities information signs should be installed at each construction segment	Contractor developed corrective action plan to improve the situation	Contractor is instructed to keep the same standard
	Enough and high visible safety signs/tapes and trench side barriers around of deep open trenches should be installed to avoid accident of population	Contractor developed corrective action plan to improve the situation	Contractor is instructed to keep the same standard
	Walls of the deep trenches (>1.5m) should be strengthened by boards to avoid landfall of the soil and accidents	Not Completed	Contractor is instructed to improve the situation
	Special blinking signs or flag men where necessary should be provided when passing streets to avoid disturbance of car movements	Contractor developed corrective action plan to improve the situation	Contractor is instructed to keep the same standard
	Enough and proper wooden/metal walkways/planks across open trenches should be installed	Contractor developed corrective action plan to improve the situation	Contractor is instructed to keep the same standard
<b>Kut-01</b>			
Mukhnari Reservoir	Trees at the construction site should be fenced properly and protected to avoid its damage	Contractor developed corrective action plan to improve the situation	Contractor is instructed to keep the same standard
	High visible safety signs/tapes and trench side barriers should be installed around of excavation of reservoir	Contractor developed corrective action plan to improve the situation	Contractor is instructed to keep the same standard

	Site should be fenced properly from all sides to avoid entrance of cattle/animals	Contractor developed corrective action plan to improve the situation	Contractor is instructed to keep the same standard
	Proper fuel/oil spill response items (sand, sawdust, special containers) should be available at the site	Contractor developed corrective action plan to improve the situation	Contractor is instructed to keep the same standard
	Surplus/accumulated waste soil should be taken away for its final disposal	Contractor developed corrective action plan to improve the situation	Contractor is instructed to keep the same standard
	All construction materials should be properly segregated and stored adequately	Contractor developed corrective action plan to improve the situation	Contractor is instructed to keep the same standard
	All workers (even personnel of subcontractor) should be equipped with complete PPE	Contractor developed corrective action plan to improve the situation	Contractor is instructed to keep the same standard
	Site internally should be arranged properly and cleaned regularly	Contractor developed corrective action plan to improve the situation	Contractor is instructed to keep the same standard
	Trees at the construction site should be fenced properly and protected to avoid its damage	Contractor developed corrective action plan to improve the situation	Contractor is instructed to keep the same standard
	High visible safety signs/tapes and trench side barriers should be installed around of excavation of reservoir	Contractor developed corrective action plan to improve the situation	Contractor is instructed to keep the same standard
<b>Ure-01</b>			
Well Fields	Fuel/oil spill response items (sand, sawdust, special containers) should be available	Completed	Contractor is given instruction to keep the standard
	Fencing of the site is to be established	Completed	Contractor is given instruction to keep the standard
	Topsoil should be managed according to the SSEMP	Completed	Contractor is given instruction to keep the standard
	Machinery and equipment should be in standard technical condition (no leakage of fuel and lubricants)	Completed	Contractor is given instruction to keep the standard
	All containers of fuel and lubricants should be placed in a special place with roofing	Completed	Contractor is given instruction to keep the standard
	Bentonite waste should be managed according to SSEMP	Not Completed	Contractor is requested to manage Bentonite waste according to the relevant SSEMP
<b>Ure-01</b>			
Pumping Station	Proper place for Parking with relevant sign should be arranged	Completed	Contractor is given instruction to keep the standard



	All construction materials should be properly segregated and stored adequately	Completed	Contractor is given instruction to keep the standard
	Fuel/oil spill response items (sand, sawdust, special containers) should be equipped with relevant signs	Completed	Contractor is given instruction to keep the standard
	Machinery and equipment should be in standard technical condition (no leakage of fuel and lubricants)	Completed	Contractor is given instruction to keep the standard
	All workers (even personnel of subcontractor) should be equipped with complete PPE	Completed	Contractor is given instruction to keep the standard
	Site internally should be arranged properly and cleaned regularly	Completed	Contractor is given instruction to keep the standard
<b>Ure-01</b>			
Network	Enough and high visible safety signs/tapes and trench side barriers around of deep open trenches should be installed to avoid accident of population	Completed	Contractor is given instruction to keep the standard
	Use tarpaulins to cover during materials transportation	Not Completed	The contractor was instructed several times to improve the situation
	Walls of the deep trenches (>1.5m) should be strengthened by boards to avoid landfall of the soil and accidents	Not Completed	The contractor was instructed several times to improve the situation
	Accumulated waste soil should be removed from construction area and disposed in a proper place	Completed	Contractor is given instruction to keep the standard
<b>Ure-02</b>			
	Enough safety signs/tapes and trench side barriers around of deep trench should be installed	Completed	Contractor is given instruction to keep the standard
	Proper place for Parking should be arranged. If necessary should be arranged several parking areas with relevant signs. Transport should be parked only at the parking area	Completed	Contractor is given instruction to keep the standard
	All construction materials should be properly segregated and stored adequately	Completed	Contractor is given instruction to keep the standard
	All containers of fuel and lubricants should be placed in a special place	Completed	Contractor is given instruction to keep the standard
	“Household Waste” containers should be installed in proper place with relevant sign	Completed	Contractor is given instruction to keep the standard
	PPE equipment should be used always and completely by all workers (even personnel of subcontractor)	Completed	Contractor is given instruction to keep the standard

	During of high-altitude works special equipment should be used	Completed	Contractor is given instruction to keep the standard
	Site internally should be arranged properly and cleaned regularly	Completed	Contractor is given instruction to keep the standard
	Enough safety signs/tapes and trench side barriers around of deep trench should be installed	Completed	Contractor is given instruction to keep the standard
	Proper place for Parking should be arranged. If necessary should be arranged several parking areas with relevant signs. Transport should be parked only at the parking area	Completed	Contractor is given instruction to keep the standard

## ANNEX E: Detailed Procedures for GRM System Implementation

### Grievance redresses mechanism (GRM)

86. Any affected person can apply at a UWSCG local service centre through different ways, either by going to the service centre, sending a letter to the service centre, or calling a hotline. The operators of the service centre can respond by going directly to the affected person if they are disabled to get the written grievance from them. As it was mentioned above the GRM in Kutaisi has been operational since April 2014, and the system operates in three stages.
87. 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.
88. The service centre operators, who are trained<sup>1</sup> in USIIP/Reg-01project, 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>2</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.
89. When a grievance is solved positively in the first stage, the grievance is closed through an Agreement Protocol, which is reflected in the eDocument – Task Management System.
90. The grievance enters a second stage if it is not solved. In that case, the authorized representative of the local service centre will help the claimant prepare a package of grievance application documents for official submission to the Grievance Redress Committee (GRC). The package contains the following information:
- Name, ID, address and contact details of the claimant
  - Description of the essence of the complaint
  - Supporting documents and evidences (photos, maps, drawings/sketches, conclusion of experts or any other documents confirming the claim)
  - Brief description of the actions proposed for the grievance resolution at the first stage and the reasons why these actions were denied
  - Minutes of meetings conducted at the first stage
91. 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) 99. 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

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<sup>1</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>2</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 eDocument service offers an opportunity to manage, find, and track documents for information-intensive organizations.

representative;(vi) Stakeholders' informal representative; and (vii) Heads of local municipalities.

92. 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.
93. 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: PUBLIC OPINION SURVEY

### Kutaisi Water Supply Rehabilitation Project (Kut – 01)

November 2016

Survey prepared by:

- Elene Aladashvili, EPTISA National Public Awareness Consultant
- Gvantsa Lukava, EPTISA Local Public Awareness Consultant

The main objective of the Public Opinion Survey was to identify: (1) whether the population at apartment buildings receives enough information on the project and its progress; (2) what were the preferred channels of communication; and (3) how the households preferred to fix the possible damages to their infrastructure caused by connection works.

The target group included households living in apartment buildings where the water meter installation process is completed and connection works will start soon.

The following methodology was applied during the survey: 80 households living in apartment buildings where the water meter installation was completed were interviewed or asked to fill out a special Questioner.

Special questioner was prepared that included the following questions:

**Question 1:** *Do you receive enough information about the Kutaisi Water Supply Rehabilitation Project?*

**Question 2:** *Do you consider this an important project?*

**Question 3:** *Through which communication channels would you prefer to receive more information about the project?*

- ☐ Door to door
- ☐ Brochures and information leaflets
- ☐ Consultation meetings
- ☐ Media
- ☐ Other \_\_\_\_\_

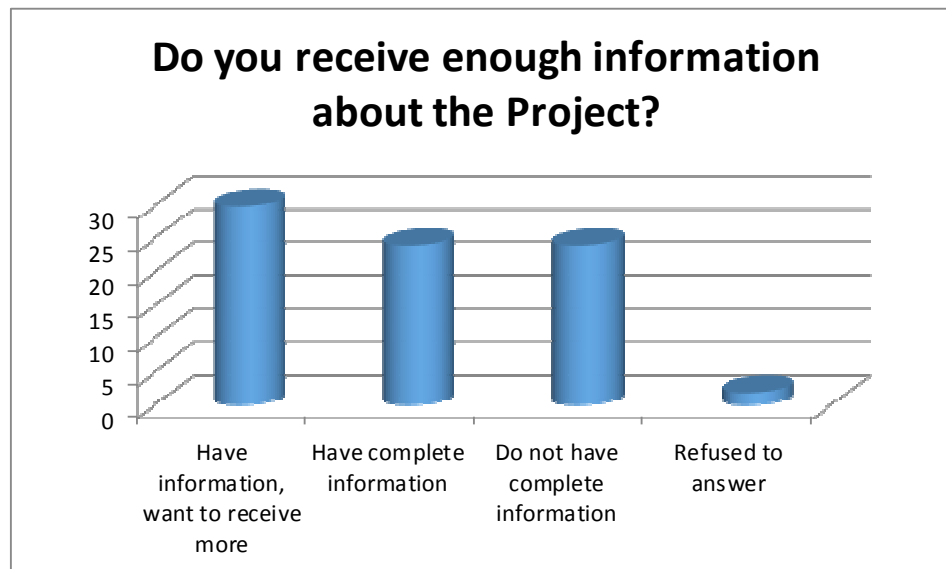
**Question 4:** *In case of minor challenges during the connection works, what is your preferred way of solution?*

- ☐ Repair works
- ☐ Monetary compensation

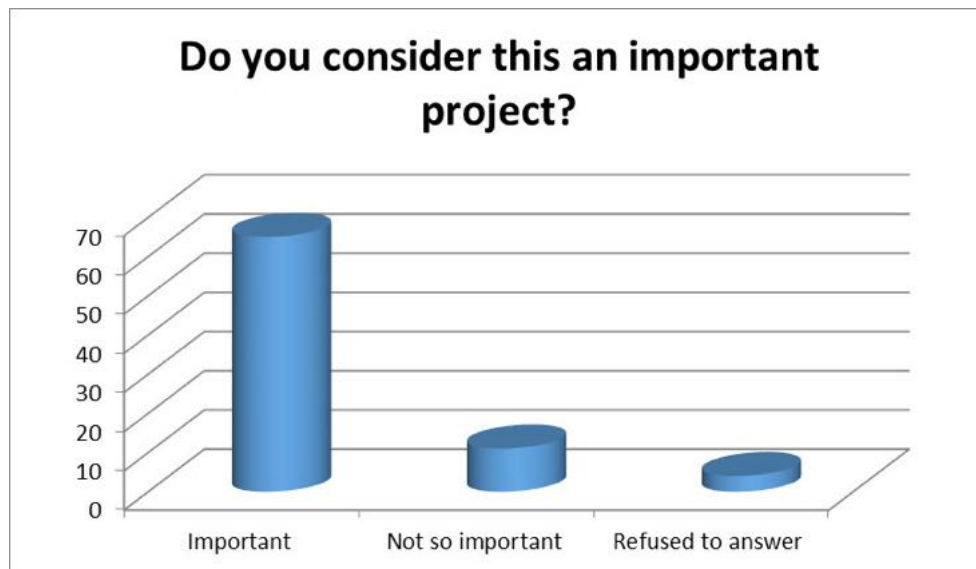
*Other/Additional comments*

Overall 80 households were interviewed in Avtokarkhana and Nikea settlements. After analyzing the data the following findings were identified:

1. 24 out of 80 households think that they have complete information about the project, 30 households think that they have information but would like to receive more; 24 think that they do not have complete information about the project; 2 refused to reply.

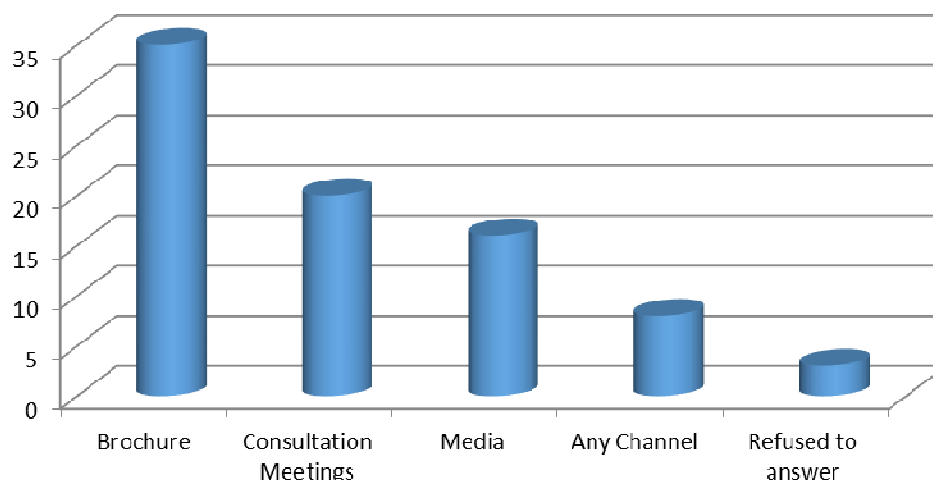


2. Majority, 65 households out of 80, think that the project is very important for their family; 11 think that it is less important; 4 refused to reply.



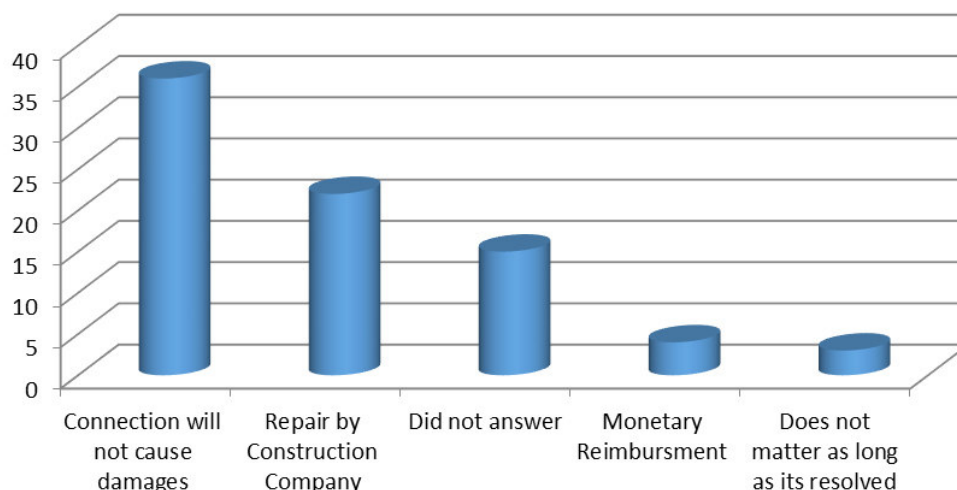
3. 35 out of 80 households prefer to receive information from the brochure/or print materials; 9 selected consultation meetings, 5 – Media, 11 households selected both brochure plus media; 3 did not want to answer and 9 do not want to receive any information.

## Which communication channel you prefer?



4. As for the problem that might arise from after connection works: 22 households would prefer if the problems are addressed by the construction company itself, 4 would prefer to receive monetary reimbursement equal to the damage, 3 think that if the problem will be taken care of the method does not matter, 10 refused to reply, 5 did not have any preferences at this moment, 36 said that there will be no damages caused to their infrastructure from connection works.

## In case of any damages after connection works, what is your preferred way of solution?



In addition the survey identified that households are interested and would like to receive more information on the following topics/issues;

- Timeframe and length of the connection works
- If there will be any changes to the current water supply schedule after they switch to the new water connection system.
- If the water supply will be limited during the connection works and if yes the households would like to be informed in advance about the schedule and length so that they are prepared.

- Overall households have positive attitudes towards the water meter installation as they think that the water meter will insure more wise consumption of water and can be less expensive.
- In several blocks the population expressed its concerns about the quality of the water meter boxes and asked for more detailed explanation and information on boxes as well as the new system (how strong the system will be if the water is supplied with high pressure, etc.).

## ANNEX G: CORRECTIVE ACTION PLANS




### Mukhnari Reservoir





Non-Compliance Report (NCR)		SMK	eptisa
Project Name :	Construction of Water Supply in Kutaisi	Project No.	P 43405-ICB-KUT-01
Project Location :	Kutaisi, Georgia	Briefing Date	
Site	Mukhnari	Issue reference no.	NCR dated 22.11.2016
Location	Kutaisi	Date of Site visit	15.09-16.09.16
Consultant	Eptisa	Notification Date	20.09.2016
Issue	Health, Safety and Environmental Issues	Action	CAP

**Corrective Action Plan:**

*SMK has already taken action to correct the subject items*



- SMK's Site Officer has taken action and trees at the construction site are fenced properly and protected to avoid its damage.
- SMK took action for high visible safety signs/tapes that are installed around of excavation of reservoir.
- SMK's took action about site fencing from all sides to avoid entrance of cattle/animals.
- SMK's Safety Manager took measures for proper fuel/oil spill response items (sand, sawdust, special containers) which are available at the site.
- SMK site engineer took action about Surplus/accumulated waste soil that are taken away for its final disposal (just amount which are needed for backfilling are left).
- All construction materials are properly segregated and stored adequately .
- All SMK's workers (even personnel of subcontractor) are equipped with complete PPE

Preventive action plan	SMK Env. Manager, Site Safety officer and Site Engineer from SMK have taken actions for subject issues.	Target Date: 18.11. 2016
Comments		
Tamta Kutateladze (SMK Environment)		

### Corrective Action Plan: Kutaisi Network

<b>Non-Compliance Report (NCR)</b>		<b>SMK</b>	<b>eptisa</b>	
Project Name :	Construction of Water Supply in Kutaisi	Project No.	P 43405-ICB-KUT-01	
Project Location :	Kutaisi, Georgia	Briefing Date		
Site	All Sites	Issue reference no.		
Location	Kutaisi	Date of Site visit	09.11-10.11.16	
Consultant	Eptisa	Notification Date	15.11.2016	
Issue	Health, Safety and Environmental Issues	Action	CAP	
<b>Corrective Action Plan:</b>				
<p><i>SMK has already taken action to correct the subject items</i></p> <ul style="list-style-type: none"> <li>- Accumulated waste soil are removed from construction area and disposed in a proper place</li> <li>- Construction materials are brought when needed to avoid its long time disposal in the streets and disturbance of residents and businesses</li> <li>- Construction activities information signs are installed at each construction segment</li> <li>- Enough and high visible safety signs/tapes and trench side barriers around of deep open trenches are installed to avoid accident of population</li> <li>- Walls of the deep trenches (&gt; 1.5m) are strengthened by boards to avoid landfall of the soil and accidents</li> <li>- Enough and proper wooden/metal walkways/planks across open trenches are installed</li> <li>- Resident houses nearby areas are clean from construction materials to avoid disturbance of residents and businesses</li> <li>- All SMK workers are equipped with complete PPE</li> </ul>				
				
<p><b>All non-compliances regarding the mentioned streets in NCR (dated 15.11.16) are eradicated, besides the draining channels were being installed by municipality</b></p>				
Preventive action plan	SMK Env. Manager, Site Safety officer and Site Engineers from SMK have taken actions for subject issues.		Target Date: 18.11.2016	
Comments				
Tamta Kutateladze (SMK Environment)				