# **Environmental Monitoring Report**

Semestral Report February 2016

# GEO: Urban Services Improvement Investment Program – Project 3

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

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

# **BI-ANNUAL ENVIRONMENTAL MONITORING REPORT**

Project Number: 43405-023 July-December 2015 Loan Number 3078-GEO (SF)

# GEORGIA: URBAN SERVICES IMPROVEMENT INVESTMENT PROGRAM (TRANCHE 3) (FINANCED BY THE ASIAN DEVELOPMENT BANK)

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- For: The Ministry of Regional Development and Infrastructure of Georgia and the Asian Development Bank
- Endorsed by: Maka Goderdzishvili, Head of Division of Resettlement and Environment Protection

January 2016

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# **ABBREVIATIONS**

ADB	Asian Development Bank
DC	Design Consultant
DREP	Division of Resettlement and Environmental Protection
EA	Executing Agency
EARF	Environmental Assessment and Review Framework
EHS	Environmental Health & Safety
EIA	Environmental Impact Assessment
EIP	Environmental Impact Permit
EMP/ SSEMP	Environnemental Management Plan/ Site-Specific Environnemental Management Plan
ES/ SES	Environmental Specialist/ Senior Environmental Specialist
GoG	Government of Georgia
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
USIIP	Urban Sector Improvement Investment Program
IA	Implementing Agency
IEE	Initial Environmental Examination
MFF	Multi-tranche Financing Facility
MoENRP	Ministry of Environment and Natural Resources Protection
MoRDI	Ministry of Regional Development & Infrastructure
NEA	National Environmental Agency
SC	Supervision Consultant
UWSCG	United Water Supply Company of Georgia
WSS	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 the time period of July December 2015.
- 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)
- 6. The following projects are financed under Tranche 3:
- 7. 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 devided into 3 areas), laying of approximately 70 km sewage pipelines; installation of approximately 1,500 watermeters; Wells drilling of 10 drinking water wells.
- 8. 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.
- 9. 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; Construction of reservoirs - 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 2015)

# Construction activities and project progress during the reporting period (July-December 2015)

# Table 1: project progress during the previous 6 months

# KUT-01

Site	Water network
Works undertaken	2.830 m of PE 100 pipes OD 63, SDR 11 installed – 8%
during July-Dec 2015	1,190 m of PE 100 pipes OD 75, SDR 11 installed – 6%
	1,920 m of PE 100 pipes OD 90, SDR 11 installed – 10%
	4,460 m of PE 100 pipes OD 110, SDR 11 installed – 11%
	1,270 m of PE 100 pipes OD 125, SDR 11 installed – 31%
	710 m of PE 100 pipes OD 140, SDR 11 installed – 59%
	5,240 m of PE 100 pipes OD 160, SDR 11 installed – 24%
	55 m of PE 100 pipes OD 180, SDR 11 installed – 2%
	1,800 m of PE 100 pipes OD 250, SDR 11 installed – 17%
	4,620 m of PE 100 pipes OD 315, SDR 11 installed – 58%
	3,200 m of PE 100 pipes OD 355, SDR 11 installed – 60%
	1,030 m of PE 100 pipes OD 400, SDR 11 installed – 47%
	52 no. underground valves installed – 21%

# URE-01

Site	Water mains installation
Works undertaken	4.508 km of PE 100 pipes OD 710, SDR 11 installed – 31%
during July-Dec 2015	
Site	Water network
Works undertaken	5.995 km of HDPE pipes DN 25-560 – 12%
during July-Dec 2015	
Site	Sewerage network
Works undertaken	10.785 km of PE 100 pipes OD 110-500 mm, SDR 11 installed – 54%
during July-Dec 2015	

# 1.2 Changes in Project Organization and Environmental Management Team

- 10. Agencies Involved in Investment Program Implementation
- 11. 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.
- **12.** United Water Supply Company of Georgia (UWSCG) is the implementing agency (IA), which is responsible for administration, implementation (design, construction and operation)

and all day-to-day activities under the loan. An Investment Program Management Office (IPMO), which is the Donor Relations Department (The name of Department was changed in October 2015 after the reorganization of UWSCG) is established within the UWSCG for all Investment Program related functions. The IPMO coordinates construction of subprojects, and ensures consistency of approach and performance.

- **13.** UWSCG as responsible IA for the project recruited a Supervision Consultant (SC) Eptisa. The national and international team of consultants assists UWSCG in the supervision of the construction of subprojects under the USIIP. The SC also provides capacity building training to contractor staff in the management and operation and maintenance of the subprojects. The SC assists UWSCG in ensuring that the subprojects are implemented according to the specified standards. SC assignment also includes the supervising of the implementation of the environmental management plans.
- 14. All mitigation measures during construction have to be implemented by the contractor and these are monitored by the supervision consultant (SC). To ensure the smooth implementation of EMPs and SEMPs 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.
- **15.** 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;
- **16.** DC is responsible for developing and incorporation of mitigation measures in design and construction.
- 17. The environmental specialist (ES) is hired by UWSCG under the USIIP to assist and advise the Resettlement and Environmental Protection Unit (UREP) (the name of Resettlement and Environmental Protection Division was also changed after the reorganization taken place in October 2015) 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.
- **18.** 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.
- **19.** ADB is the donor financing the Investment Program. Environmental management organization is shown in Figure 1 and Figure 2.



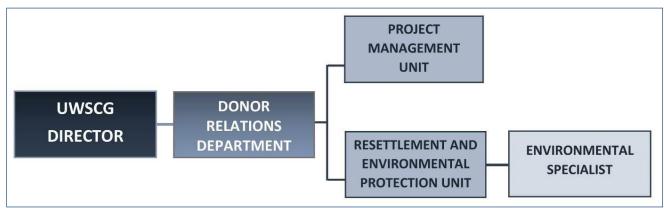
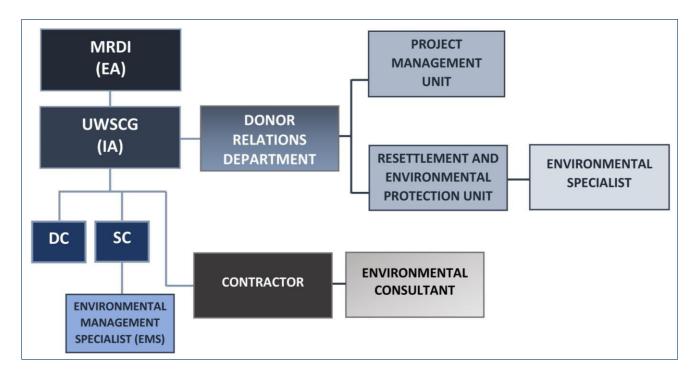


Figure 2: Structure Diagram of the Agencies Involved in Investment Program Implementation



- 20. Relationships with Contractors, Owner, Lender, etc
- **21.** 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.
- 22. 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.
- 23. 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.
- 24. The team has constant communication with the Supervision Consultant, Contractor, reviews/ comments all environmental reports submitted by DC, SC and contractors.
- 25. 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.

- **26.** SC is responsible for environmental capacity building, monitoring of implementation of SEMPs 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.
- 27. ADB oversees project sites regularly and gives clear instructions for the project sites improvements with regard to environmental safeguards.
- 28. 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.
- **29.** 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.
- **30.** Contractor of KUT-01 project operated during the reporting period with the following subcontractor:
  - KBY Uluslararası Insaat Dan.Tic.Ltd.Şti.
- **31.** Project organization for the awarded contracts listed above is given in the table below:

Contract #	Employer	Contractor	Contract Signature date	Contract Final Date
Contract No: P43405-ICB- URE-01	UWSCG	JV of Peri Ltd (Georgia) Leading Partner and Slon LLC (Azerbaijan)	28-Oct-14	22-Nov-17
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-KUT- 01	UWSCG	SMK Ulusal Insaat Ve Ticaret A.S. (Turkey)	22-Apr-15	8-Jun-18

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

# PART II - ENVIRONMENTAL MONITORING

- **32.** 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, 2015. Unscheduled monitoring visits were carried out and non-compliance noteces have been issued to the contractor as needed. Mitigation measures to reduce major environmental impacts have been instructed to contractors during the monitoring visits.
- **33.** The monitoring activities included:
  - The monitoring of compliance of construction activities under KUT-01 project sites to the overall project EMP;
  - The monitoring of compliance of construction activities under the Ure-01 project sites to the overall project EMP

- **34.** Environmental Monitoring Specialist hired under the KUT-01 subproject conducted the dayto-day monitoring of the construction sites.
- **35.** Environmental Monitoring Specialist hired under the URE-01 subproject conducted the dayto-day monitoring of the construction sites, developed the monthly monitoring reports and submitted to Eptisa.
- **36.** Environmental Monitoring Specialist of SC developed quarterly monitoring reports for UWSCG/UREP based on the monthly reports submitted by the Contractor and based on environmental site inspection.
- **37.** ES of UREP performed monitoring of contractor's performance with the approved 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.
- **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.** The following items are monitored during the implementation of the project: (Kut-01 and Ure-01).
  - Air Quality
  - Noise
  - Vibration
- **40.** In order to conduct measurements under the Kut-01 project, Contract was signed between the Contractor and the Ltd "Eco-Spectri. The measurements were carried out at various construction sites (network) in Kutaisi on 28 December 2015.
- **41.** To carry out measurements under the Ure-01 project, contract was signed between the Contractor and the National Environmental Agency. The measurements were carried out at various construction sites (network) in Ureki in December 2015.
- **42.** The parameters measured for the monitoring data at the construction sites are as follows: dust, carbon monoxide, nitrogen dioxide, sulfur dioxide, vibration and noise. According to data received in December 2015 the obtained results did not exceed the National Environmental Standard (Maximum Permissible Level) of Dust, vibration, CO, NO2, SO2 and Noise, therefore no additional mitigations are required.
- **43.** Location and data are provided in Annex A. The next monitoring measurements will be conducted in May 2016 and results will be reflected in the next EMRs.

3.1 The Environmental Management System, Site-specific Environmental Management Plan (SSEMP), and Work Plans

# SSEMPs prepared under URE-01, URE-02 and KUT-01 projects (July-December 2015):

- **44.** SSEMP for Reservoir #2 (Ure-01) and pumping station is already prepared by Contractor, endorsed by the SC and approved by UWSCG. SSEMP for Reservoir #1 (Ure-01) will be updated as soon as final design developed and location is identified.
- **45.** SSEMP for URE-02 project is prepared by Contractor, endorsed by SC/Eptisa and approved by the UWSCG.
- **46.** Separate SSEMPs for Godogani Reservoirs and its access road, Mukhrani reservoir and pumping station under the KUT-01 will be prepared by contractor and submitted to UWSCG by the end of February 2016.
- **47.** Status of Environmental management plans is summarized in the table below:

# **Table 3:** Status of Environmental management plans

Management Plan	Status	Date of Submission
Site-Specific Environmental Management Plan (SSEMP) under Ure-02 project for WWTP	Submitted and approved	November 2015
Environmental Management Plan/Site- Specific EMP (SSEMP) under KUT-01 project, in particular:	Not prepared as yet	Will be submitted as soon as final design is developed
Godogani Reservoir		
Mukhrani Reservoir		
Pumping station		
Company Waste management plan for construction phase	Not submitted	To be developed and submitted
Kutaisi KUT-01		
Environmental Management Plan/Site- Specific EMP (SSEMP) under Ure-01 project	Submitted, and approved for Res- 02 and Pumping Station	10.08.2015
Reservoir #1 Reservoir #2 Pumping station Well fields	Not submitted as yet	SSEMP for Reservoir #1 will be updated after the final location and design is developed and approved
Company Waste management plan for construction phase	Not Submitted	To be developed and submitted
Under Ure-01 project		

# 3.2 Site Inspections and Audit

- **48.** Regular site monitoring visits were carried out during the reporting period by Eptisa and UWSCG for REG-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.
- **49.** Site inspection and audit during the reporting period have been carried out on: 20 August, 22 October, 17 November, 2-3 December and 8-9 December 2015. Monitoring Compliance and inspection monitoring forms have been filled in during the site visits.
- **50.** 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).
- **51.** 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**

#### Ure-01 and Kut-01 projects

All corrective actions requested after the Monitoring of sites were mostly improved by the 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, one "Non-compliance notice" was issued by the environmental specialists of Eptisa and UWSCG to the contractor for Kut-01 and one non-compliance notice for Ure-01 projects (See Annex c).

#### **3.4 Corrective Action Plans**

**52.** For the purpose of resolving the observed issues, the corrective action plans have been developed by the contractor. 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.

<b>Table 4:</b> Actions taken for implementation of mitigation measures under Kut-01 and Ure-01
projects by the end of December 2015

Construction Site	Environmental Issues	Action taken
	Construction materials should be brought when needed to avoid its long time disposal in the streets	Partially Completed
	Protect trees to avoid their damage during transmission line construction	Partially Completed
	All open tranches should be fenced with safety lines to avoid accident	Partially Completed

#### Ure-01

# Kut-01

Construction Site	Environmental Issues	Action taken
	Sites should be kept well organized	Partially Completed
	All accumulated waste soil at the road sides should be taken away for its final disposal	Partially Completed
	Resident houses nearby areas should be clean from construction materials to avoid disturbance of residents and businesses	Partially Completed
	Protect all trees nearby construction zone to avoid their damage	Partially Completed
	Materials for refilling of tranches should be brought to the site when refilling starts	Partially Completed
	Always use tarpaulins to cover during materials transportation	Partially Completed

# 3.5 Actions taken to reflect the findings of ADB mission carried out on 5-8 May 2015 and on 7-9 October 2015

Rehabilitation of Water Supply System in Ureki – T1, T2, T 3				
Ure-01	SSEMPs for Res-01, Res-02, PS and Well Fields should be prepared by CC as soon as detail design is completed, then endorsed by Eptisa and approved by UWSCG, before commencing construction works: SSEMP for R-1 SSEMP for R-2: SSEMP for Pumping Station SSEMP for Well Fields	End of May 2015 Mid June 2015 End June, 2015.	It should be mentioned that SSEMPS for Res-01, Res- 02 and pumping stations have been developed by Contractor/Peri endorsed by SC/Eptisa and approved by UWSCG in 10.08.2015. But due to the fact that Location and design for Res-01 is changed, now the new SSEMP will be prepared as soos as design is completed. Alternative location is considered for Res-02 as well, due to the access road that will be rehabilitated by the municipality only by the end of 2016. Two options are considered now: alternative access road and alternative location for the reservoir (in this case new SSEMP will be developed).	
	At the R-1 there are 3 abandoned buildings and 1 local residential house. Consultation with the residents		Written agreement signed by the AP was obtained by UWSCG but as the place is	

was conducted informing of upcoming construction activities and the possible environmental impacts during construction. The PIU reported that the APs would not like to be resettled and would not complain during construction activities. The Mission advised the PIU that written agreement signed by the APs be obtained and properly documented.		changed for construction this letter is not applicable any more.
The Mission requested Eptisa and Peri consider all possibilities to minimize tree cutting and engage a botanist as needed for UWSCG approval. It is also requested that appropriate design and landscaping plan be prepared so that the site could be used for scenic and recreational purposes in future.		SC and Contractor considered all necessary options to minimize tree cutting engaging the biodiversity specialist to carry out additional survey of the construction site, but finally the location and design for Res-#1 is changed and the site will be used for recreational purposes by the local municipality in future.
Rehabilitation of the access road should be planned. Attention should be paid to topsoil preservation and sub-soil disposal for the site post- construction restoration. Necessary permits will be obtained according to GEO legislation.		Rehabilitation of access road is under consideration.
Status of findings of ADB mission carried out of	n 7-9 October 2015	
Rehabilitation of Water Supply System in Ureki		
R1 and R2: Minimization of tree cutting (old pine trees) to be considered in the design by CC (Peri Ltd.).	May-June, 2015	Minimizing the cutting of trees is no longer an issue under the Rez-01 in Ureki. As it was mentioned above the site for Res # 1 is changed and will be used for recreational purposes in future.
Deadlines for submission of the SSEMPs are the following: For R-1 and R-2	End of May 2015	New site for res-01 is under discussion as soon as decision will be made SSEMP will be developed before commencement of any activities.
For Pumping Station	Mid June 2015	Prepared and approved for Pumping station and Reservoir #2.
For Well Fields:	End June, 2015.	Not started for Well Fields as yet because of the

# 3.6 Consultations and Complaints

- **53.** The public awareness activities implemented during the reporting period included identification and introduction meetings with the project stakeholders, public consultation meetings with interested civil society representatives as well as awareness raising activities for the pilot rehabilitation site.
- 54. As the interest in the project implementation process was very high from the local population and civil society representatives, Eptisa PA consultants decided to organize a public consultation meeting in coordination with the Construction Company and local government representatives to provide stakeholders with more information about the project objectives and planned activities, timeline and expected results. The consultation meeting was held in Kutaisi Democratic Engagement center and was attended by local population affected by the project, civil society representatives, local self-government representatives and media. During the consultation meeting the Construction Company representatives presented planned project activities, timelines and possible challenges. Eptisa resident engineer also talked about the importance of the project and its long-term benefits and perspectives. After the presentations attending audience had an opportunity to ask questions during the open discussion. The audience was mainly interested in the environmental impact of the project, chances of employing local population in the process of rehabilitation works, local heritage and cultural monument preservation plan and other related issues. Representatives of the local NGO sector asked the construction company to organize a media tour with NGOs to see the rehabilitation sites once the rehabilitation is in progress. Construction Company and Eptisa PA representatives promised to organize a public consultation/media tour on the rehabilitation sites in autumn 2015. The meeting was covered by local media.
- **55.** During the reporting period Eptisa PA consultants in cooperation with UWSCG and Construction Company created special information posters which informed local population living near the pilot rehabilitation site on Nikea street about the project, rehabilitation works, timelines and expected results. It also included information about the UWSCG hotline and grievance committee. The information posters were distributed in the entrances/lobbies of each apartment building blocks as well as supermarkets or other relevant public gathering places.
- 56. During the reporting period Eptisa PA Consultants started developing Public Awareness Strategy for the KUT-01 project. They held meetings with construction company, UWSCG, NGO representatives and affected local population. The main goal of these meetings and discussions was to draft a situation analyses. Also to find out what information stakeholders had about the project, what topics they were most interested in, and which communication channels they would prefer to receive more information about the project. The affected stakeholders were mainly interested in the outcomes and benefits of the project: how would the water supply graphic improve after the rehabilitation; would there be any limitations to water consumption, would the water quality and pressure improve after the rehabilitation process and others. PA strategy for the project will be ready as soon as the interviews, meetings and public opinion survey are assessed.

#### Grievance redresses mechanism (GRM)

57. 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. No complaints

have been received under the Kut-01 project during the reporting period July-December 2015.

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

### 4.1 Conclusions and recommendations

- **58.** 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.
- **59.** Necessary instructions have been given to the Contractor by UWSCG and SC to follow the EMPs and SSEMPs for Kut-01 and Ure-01 projects.
- **60.** More detailed recommendations are with indication of the entities responsible for their implementation are provided in the table below:

### Table 5: Recommendations to address Environmental Issues

Recommendations KUT- 01 Kutaisi: Networks	Responsible Party
All accumulated waste soil at the road sides should be taken away for its final disposal	Contractor
Resident houses nearby areas should be clean from construction materials to avoid disturbance of residents and businesses	Contractor
Materials for refilling of tranches should be brought to the site when refilling starts	Contractor
Always use tarpaulins to cover during materials transportation	Contractor
Ure-01	
Construction materials should be brought when needed to avoid its long time disposal in the streets	Contractor
Protect trees to avoid its damage during transmission line construction	Contractor
All open tranches should be fenced with safety lines to avoid accident	Contractor
Construction materials should be brought when needed to avoid its long time disposal in the streets	Contractor
Protect trees to avoid its damage during transmission line construction	Contractor

# 4.2 Action Plan for the next period

**61.** Contractor to prepare, SC to endorse and UWSCG to approve SSEMPs for Godogani Reservoir, Mukhrani reservoir and Pumping station.

- 62. The following SSEMPs should be prepared and updated under the URE-01 Project: SSEMP for Reservoir #1 should be updated and SSEMP for water well fields should be prepared
- **63.** Contractor to prepare, SC to endorse and UWSCG to approve Updated SSEMP for Well fields under Ure-01 project and updated SSEMP for Res-01 project.
- **64.** Conduct monitoring of environmental quality under Kut-01 project at each construction site in with particular reference to dust, noise and vibration. The specific plan for measurement is as follows:

Parameters	Quarterly measurement
Dust	May 2016
Vibration	May 2016
carbon monoxide	May 2016
nitrogen dioxide	May 2016
sulfur dioxide	May 2016
Noise	May 2016

65. Conduct monitoring of environmental quality under Ure-01 project at each site

Parameters	Quarterly measurement
Dust	May 2016
Vibration	May 2016
carbon monoxide	May 2016
nitrogen dioxide	May 2016
sulfur dioxide	May 2016
Noise	May 2016

# ANNEX A: MONITORING DATA

# Annex 1 Monitoring measurements under Contract No: P43405-ICB-KUT-01

Aloca of Proper Aloca 1	Coordinates	Dusts Mg/m		CO Mg/m	3	NO <sub>2</sub> Mg/m	1 <sup>3</sup>	SO <sub>2</sub> Mg/m	13	Noise db	e	Radia mR/h		vibro- accel m/sec	eration
Mukhrani	42°13'46.04" N:	0.5	Results	5.0	C Results	0.2 Standard	stinuts Results	Standard 0.5	StinsaR ≥0.1	Standard	G Results	0 Standard	0 Results	puppungts 4.0	stinsey 0.04
Reservoir	42°41' 11.57" E		≥0,1		0.9	_	0.003	-	0.3	-	69	-	12		3.14
Sulkhan- Saba street	42"40'35.06" E		20,1		0.3		0.000				1000				
Shevchenko streets	42°14'45.26"N 42°40'09.51"E		≥0.1		0.5		0.002		0.2		68		12		2.75

Irakli Kaviladze

IRCA Register Principal Auditor of EMS Systems

"Eco-Spectri" Ltd

Kau 1

Monitoring Measurements under Ure-01 project.

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NATIONAL ENVIRONMENTAL AGENCY

№ 12/1-96

26 01 \_\_\_\_ 20166

შპს "ფერი"-ს დირექტორს **ბ-ნ მერაბ იორდანიშვილს** 

ბატონო მერაბ,

საქართველოს გარემოსა და ბუნებრივი რესურსების დაცვის სამინისტროს ს.ს.ი.პ "გარემოს ეროვნულ სააგენტო"-სა და შპს "ფერი"-ს შორის 2016 წლის 14 იანვარს გაფორმებული ფასიანი მომსახურების შესახებ ფმ-3/52 ხელშეკრულების თანახმად, გაწვდით დაბა ურეკში, თქვენს მიერ მითითებულ ატმოსფერული ჰაერის ოთხ წერტილში დღის მანმილზე 4-ჯერ გაზომილი დამაბინმურებელ ინგრედიენტთა კონცენტრაციის შედეგებს - ხმაურის, ნახშირწყალბადის, ნახშირის დიოქსიდის, აზოტის დიოქსიდის, მტვერის, გოგირდის დიოქსიდისა და გოგირდწყალბადის შემცველობაზე.

დანართი: 2 გვ.

პატივისცემით,



თამარ ბაგრატია

დ.აღმაშმნმალის გამგ. 150, 0112, თბილისი, სამართველო 150 D. AGMASHENEBELI AVE, 0112, TBILISI, GEORGIA



Tel.: +995 32 2439502 Fax: +995 32 2439503 E-mail: info@meteo.gov.ge Web: www.meteo.gov.ge ინფორმაცია ატმოსფერულ ჰაერში დამაბინძურებელ ინგრედიენტთა კონცენტრაციის შესახებ შპს "ფერი"

1

	Isofinisols smokols	4			Bob	კონცენტრაცია მგ/მ <sup>3</sup>	( <del>3</del> 3		
5         1         50.1         0         0.25         <0.001           2         64.1         <1	აიაჯიი ალეიი ადგილი, კორდინატები	სინჯის №		ნაბშირწყალბადები	ნახშირბადის ოქსიდი, CO	აზოტის დიოქსიდი, NO2	მტვერი	გოგირდის დიოქსიდი, SO2	გოგირდ წყალბადი H <sub>2</sub> S
2         64.1         <1         0.13         0.002         0           3         49.7         0         0         2         <0001	წვერმაღალა X 0730415	1	50.1	0	0.25	<0.001	0.007	<0.1	<0.1
3         49.7         0         0.2         <0.001           4         48.2         0         0.18         <0.001	Y 4649265	2	64.1	<1	0.13	0.002	0.007	<0.1	<0.1
4         48.2         0         0.18         <0001           1         49.8         0         0,17         <0001		3	49.7	0	0.2	<0.001	0.008	<0.1	<0.1
1         49.8         0         0,17         <0.001           1         2         68.9         <1		4	48.2	0	0.18	<0.001	0.012	<0.1	<0.1
2         68.9         <1         0.34         0.012           3         73.4         0         0.34         0.012           3         73.4         0         0.8         0.04           4         67.2         0         0.8         0.04           1         54.8         0         0.27         <0.001		1	49.8	0	0,17	<0.001	0.03	<0.1	<0.1
3         73.4         0         0.8         0.04           4         67.2         0         0.27         <0.01	მილების უბანი X 0729018	2	68.9	~	0.34	0.012	0.02	<0.1	<0.1
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Y 46521//2	3	73.4	0	0.8	0.04	0.04	<0.1	<0.1
mob 3.72         1         54.8         0         0.97         0.001           2         71.1         <1		4	67.2	0	0.27	<0.001	0.02	<0.1	<0.1
200 3.72         2         71.1         <1         1.37         0.018           3         72.2         <1	ურეკი თაიაიშიითის 172	1	54.8	0	0.97	0.001	0.06	<0.1	<0.1
3         72.2         <1         0.83         0.015           4         71.2         0         0.57         0.021	X 0729491	2	71.1	<li><li><li></li></li></li>	1.37	0.018	0.02	<0.1	<0.1
71.2 0 0.57 0.021	Y 4653247	3	72.2	<l< td=""><td>0.83</td><td>0.015</td><td>0.04</td><td>&lt;0.1</td><td>&lt;0.1</td></l<>	0.83	0.015	0.04	<0.1	<0.1
		4	71.2	0	0.57	0.021	0.04	<0.1	<0.1

ძეკვეთილი- ქობულეთის ტრასა, დ/ს "საბას"ჩასახვევი	1	84.4	1	1.86	0.12	0.11	<0.1	<0.1	
X 0729140 Y 4649407	2	87.1	1	2.1	0.157	0.13	<0.1	<0.1	
შეკვეთილი X 0729002	1	71.2	<l< td=""><td>0.24</td><td>0.001</td><td>0.009</td><td>&lt;0.1</td><td>&lt;0.1</td><td></td></l<>	0.24	0.001	0.009	<0.1	<0.1	
Y 4650652	2	69.3	<1	0.18	<0.001	0.008	<0.1	<0.1	

შემსრულებლები:

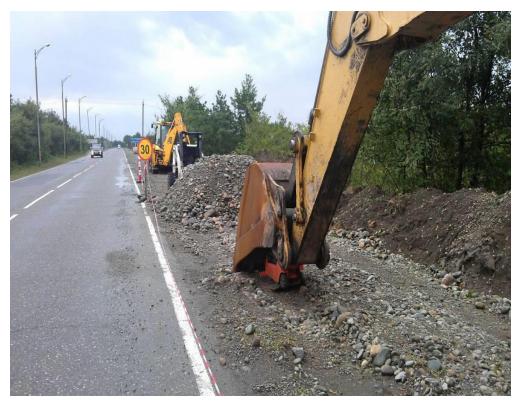
მთავარი სპეციალისტი უფროსი სპეციალისტი შეთანხმებულია გარემოს დაზინძურების მონიტორინგის დეპარტამენტის უფროსი:

ประเบ ต.ษาธิถง ก.ศ. อ.ษรคิดชิวกლก მ. არაზიძე AND THE NAME OF THE PARTY OF TH

# **ANNEX B: PROJECT PHOTOS**



Kut-01





# ANNEX C: NON-COMPLIANCE NOTICES

# NON-COMPLIANCE NOTICE

Project: USIIP	
Contract No: KUT-01	Non-compliance Notice
Contractor: SMK	KUTAISI
Reference:	
Kutaisi –NETWORK	

This notice is to advice 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 KUTAISI**

### **NETWORK**

- Sites should be kept well organized
- All accumulated waste soil at the road sides should be taken away for its final disposal
- Resident houses nearby areas should be clean from construction materials to avoid disturbance of residents and businesses
- Protect all trees nearby construction zone to avoid its damage
- Materials for refilling of tranches should be brought to the site when refilling is to start
- Always use tarpaulins to cover during materials transportation



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

# Date of site visits: 07- 08.10.15

Irakli Legashvili - Environmental specialist - "Eptisa"

Ketevan Chomakhidze - Environmental specialist "UWSCG"

#### NON-COMPLIANCENOTICE

Project: USIIP	Non-compliance Notice
Contract No: URE-01	UREKI
Contractor: PERI	

# **Reference:**

# UREKI – NETWORK

This notice is to advice 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

# NETWORK

Construction materials should be brought when needed to avoid its long time disposal in the streets

Protect trees to avoid its damage during transmission line construction

All open tranches should be fenced with safety lines to avoid accident



Accumulated waste soil should be removed from construction area and disposed in a proper place

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

Date of site visits: 07- 08.10.15	
Irakli Legashvili - Environmental specialist - "Eptisa"	
Ketevan Chomakhidze - Environmental specialist "UWSC	G"

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

Reference	Requirement	Action to date	Action required/comment
Kut-01			
	All accumulated waste soil at the road sides should be taken away for its final disposal	Partially completed	Despite of the numerous instructions given by SC and UWSCG this requirement needs to be improved
	Resident houses nearby areas should be clean from construction materials to avoid disturbance of residents and businesses	Partially completed	Despite of numerous instructions given by EMSs of SC and UWSCG this requirement needs to be improved
	Materials for refilling of tranches should be brought to the site when refilling is to start	Partially completed	Despite of numerous instructions given by EMSs of SC and UWSCG and issues non-compliance notes this requirement needs to be improved
	Always use tarpaulins to cover during materials transportation	Partially completed	Despite of numerous instructions given by EMSs of SC and UWSCG this requirement needs to be improved
	All accumulated waste soil at the road sides should be taken away for its final disposal	Complete d	Maintain the same standard
	Resident houses nearby areas should be clean from construction materials to avoid disturbance of residents and businesses	Partially Complete d	Needs improvement
	Materials for refilling of tranches should be brought to the site when refilling is to start	Partially Complete d	Despite of numerous instructions given by EMSs of SC and UWSCG sometimes non-hazardous waste is not removed timely
Ure-01			
	Construction materials should be brought when needed to avoid its long time disposal in the streets	Not completed	Despite of the numerous instructions given by SC and UWSCG
	Protect trees to avoid its damage during transmission line construction	Partially Complete d	To improve the standard is required
	All open tranches should be fenced with safety lines to avoid accident	Partially completed	To improve the standard is required
	Construction materials should be brought when needed to avoid its long time disposal in the streets	Complete d	Maintain the same standard

# ANNEX E: DETAILED PROCEDURES FOR GRM SYSTEM IMPLEMENTATION

### Grievance redresses mechanism (GRM)

- 66. 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.
- 67. 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.
- 68. The service centre operators, who are trained1 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 system2 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.
- **69.** 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.
- **70.** 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
- 71. 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 representative;(vi) Stakeholders' informal representative; and (vii) Heads of local municipalities.

<sup>&</sup>lt;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>&</sup>lt;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 eDocumentservice offers an opportunity to manage, find, and track documents for information-intensive organizations.

- **72.** 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.
- **73.** 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