

Environmental Monitoring Report

Semestral Report
February 2016

GEO: Urban Services Improvement Investment Program – Project 1

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.

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ABBREVIATIONS

ADB	Asian Development Bank
DC	Design Consultant
UREP	Unit 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	Environmental Management Plan/ Site-Specific Environmental 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 1 of the Investment Program includes:
 - Construction of Mestia Headworks (MES-01)
 - Construction of Mestia Water Treatment Plant and Reservoirs (REG-02)
 - Improvement of Water Supply Infrastructure in Anaklia, Kutaisi and Poti (REG-01)
 - UWSCG Office Building
 - Construction of the Water Supply Network in Ureki (Ure-01).
6. The following projects are financed under Tranche 1:
7. **Mestia Water Supply Headworks (Contract MES-01).** The project comprises of the construction of a Tyrolean Weir as intake structure on Mestia Chala River for the capture of raw water. The discharge is estimated at minimum 1,000 liters/second in dry seasons. The location has been chosen for its altitude and the possibility to supply the water treatment plant, the adjoining reservoir and from there the largest part of the distribution network, by gravity. Apart from the intake, the scope of work comprises 10.75 km transmission lines to the site of Water Treatment Plant and a reservoir and the connection of this location to the distribution network.
8. The contract MES-01 was signed on 10 October 2011 with Joint Venture of Dagi LTD – Georgia and Enguri 2006 LTD – Georgia (which changed its corporate name to Enguri - New Construction LTD on 11 April 2013), and the scheduled Time for Completion was on 31

October 2013. The contract has completed the works on the reservoir, the intake, and the transmission pipeline, including its testing and the installation of the last section in the LARP Corridor. LARP compliance report was issued by EPTISA in July 2014. Taking over of the facilities took place on 20 July 2014.

9. **Kutaisi, Poti & Anaklia water supply infrastructures (contract reg-01).** The scope of works includes improvement of water supply infrastructure in Anaklia, Kutaisi and Poti, in particular, reservoirs and pumping stations, transmission lines and distribution lines of water supply systems as well as a water treatment plant in Poti. The project envisages installation of water pipelines on 96 km. Concrete water reservoirs will be built on 5 places with total capacity of 35,000m³. The project also covers construction of 4 pumping stations (with total capacity of 4,516 m³/h) as well as construction of water treatment facility. Works worth of 26,422 935 GEL will be implemented in Kutaisi, as a result of which 14,000 households will receive a 24-hour water supply whereas 36,000 household will see their water supply services improved.
10. United Water Supply Company of Georgia under the Ministry of Regional Development and Infrastructure of Georgia signed a contract (#UWSCG/ICB/CW-2013-REG-01) with Spanish Cobra Instalaciones y Servicios. The Contract was made effective 19 September 2013.
11. Post Construction Audit will be carried out for Anaklia Darcheli reservoir by the end of January 2016. The findings and recommendations of the audit will be presented in the next EMR January-June 2016.
12. **Tbilisi Office Building.** Detailed design for construction of a new head office of UWSCG was prepared and funded by GoG. IEE for office building completed and was submitted to ADB on 02.08.2014. The baseline survey and biodiversity study of the project area was conducted. Public Hearing meeting was held on 2 July 2014.
13. The new construction area is located in the suburb area of the city in close proximity with Tbilisi State University. Number of door-to-door public consultations have been carried out with the local population. The specially developed invitation letters prior to the Public Hearing, signed by the head of UWSCG was distributed among the local population and stakeholders.
14. United Water Supply Company of Georgia under the Ministry of Regional Development and Infrastructure of Georgia signed a contract (#CW/ICB/Office-01) with Georgian Construction Company DAGI Ltd on 1 December 2015. Date of commencement of civil works is December 29, 2015. The original completion date of the works is 21.06.2017
15. **MESTIA Water Supply Facilities (Contract REG-02).** The scope of works includes: a new water treatment plant (WTP); the rehabilitation of Tsniashi spring catchment; a new reservoir at Lanchvali (1,000 m³); a new reservoir at Shgedi (1,000 m³); transmission pipes of approximately 9,200 meters.
16. The Contractor has to design and build a WTP with a treated water standard that complies with the European standard for the drinking water quality and is defined in the Council Directive 98/83/EC. The new WTP will have a design capacity of 80 l/s to serve the projected population in 2040. Some of the components (hydrocyclone, micro-/ultrafiltration, drinking, process and backwash water pumps) to be constructed under this contract will be for half of the design population in 2040 at this stage. Contract was signed with JV Ludwig Pfeiffer Hock und Tiefbau GmbH & Co. KG and ProtecnoSrl on 22 September 2014 and Notice-to-Proceed given on 08 December 2014.
17. Construction of Water Supply and Wastewater Network in Ureki/Phase I (URE-01). The project is simultaneously financed from Tranches I, II and III. The planned works under Tranche I included construction of Res-01 and Res-02 (2 x 3,000 m³ and 1 x 1,200 m³) and one water supply pumping station (78m³/h and 676 m³/h), but currently location of Res-01 is changed. Final design and location is under consideration and will be finalized by the mid of January.

18. The Contract is signed with JV of Peri Ltd (Georgia) Leading Partner and Slon LLC (Azerbaijan) on October 28, 2014. Commencement date was November 24, 2014. Completion date is scheduled on November 22, 2017. The project is foreseen to serve 35,000 tourists and 5,400 local inhabitants by year 2040.

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

Construction Activities during previous 6 months under REG-01 project (July – December 2015)

Table 1: project progress during the previous 6 months

REG-01

REG-01 (KUT)	Kutaisi water distribution networks
Sites	Kutaisi streets
Works undertaken during July-Dec 2015	8.96 km of network pipes (PE 63-355 mm) laid – 19% 28no. fire hydrants installed – 14% 44 connections of existing pipes to new network – 47% 1 no. connection to existing reservoir and PS made – 25% 7,871 water meters (apartments) done – 20%

REG-01 (KUT)	Kutaisi transmission pipelines
Works undertaken during July-Dec 2015	1.751 km of DCI 150-400 mm water mains laid – 13%

REG-01 (KUT)	Kutaisi reservoirs & pump stations
Site	TV Tower Reservoir
Works undertaken during July-Dec 2015	0 m3 of concrete (for reservoir and chlorination unit poured (100% done already as 30/06/2105)
Site	Tetramitsa reservoirs
Works undertaken during July-Dec 2015	1,580 m3 of reservoir concrete poured – 92%
Site	VazhaPshavela reservoir & pumping station
Works undertaken during July-Dec 2015	295.5 m3 of concrete (for reservoir & PS) poured – 5%
Site	Kldiashvili reservoir & pumping station
Works undertake during July-Dec	5,922.68 m3 of concrete (for PS) poured – 98%

2015	
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REG-01 (POT)	Road & connection pipes between Nabada reservoirs & PS and temporary pipe connections
Works undertaken during July-Dec 2015	<p>3,518 m³ of road embankment done – 18%</p> <p>890 m of electrical & command cables done bet/ reservoirs, PS, & Operation bldg. and chlorination unit – 87%</p> <p>122 m of service water supply pipes laid from PS to Operation bldg., chlorination unit & reservoirs – 61%</p> <p>423 m of drainage pipes laid from PS & reservoir – 212%</p>

REG-01 (POT)	Connection of Villages to existing Steel pipe DN 350 mm and Village network extension
Works undertaken during July-Dec 2015	<p>0.5 km of HDPE pipes 90-250 mm laid – 2%</p> <p>35 m of railway crossings done – 10%</p> <p>271 no. of water meters & water meter chambers installed – 136%</p>

REG-01 (POT)	Nabada Pumping Station with Operation & Chlorination bldg.
Works undertaken during July-Dec 2015	445 m of drilling for 0.40 m x 0.40 m piles done – 89%

REG-01 (POT)	Nosiri well field
Works undertaken during July-Dec 2015	<p>Transformer station bldg. brought to 95% completion</p> <p>56 m of HDPE 200 mm connection pipes installed bringing total to 97%</p>

URE-01

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

1.2 Changes in Project Organization and Environmental Management Team

19. Agencies Involved in Investment Program Implementation

20. 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.
21. United Water Supply Company of Georgia (UWSCG) is the implementing agency (IA), which is responsible for administration, implementation (design, construction and operation) and all day-to-day activities under the loan. An Investment Program Management Office (IPMO), which is under the Department for Donor Relations (Since October 2015 the name of the former Department of Investment Projects Management is changed) is established within the UWSCG for all Investment Program related functions. The IPMO coordinates construction of subprojects, and ensures consistency of approach and performance. In May 2015 a new director Mr. Nikoloz Kizikurashvili was appointed in UWSCG.
22. UWSCG as responsible IA for the project recruited a Supervision Consultant (SC). The national and international team of consultants assists UWSCG in the supervision of the construction of subprojects under the USIIP. The SC also provides capacity building training to contractor staff in the management and operation and maintenance of the subprojects. The SC assists UWSCG in ensuring that the subprojects are implemented according to the specified standards. SC assignment also includes the supervising of the implementation of the environmental management plans.
23. All mitigation measures during construction have to be implemented by the contractor and these are monitored by the supervision consultant (SC). To ensure the smooth implementation of 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.
24. 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;
 - disposal Plan agreed with the MoENRP and Local Government
25. DC is responsible for developing and incorporation of mitigation measures in design and construction.
26. The environmental specialist (ES) is hired by UWSCG under the USIIP to assist and advise the Unit of Resettlement and Environmental Protection (UREP) (the name of Division of Resettlement and Environmental Protection was changed after the reorganization of UWSCG in October 2015) 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.

- 27. 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.
- 28. 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

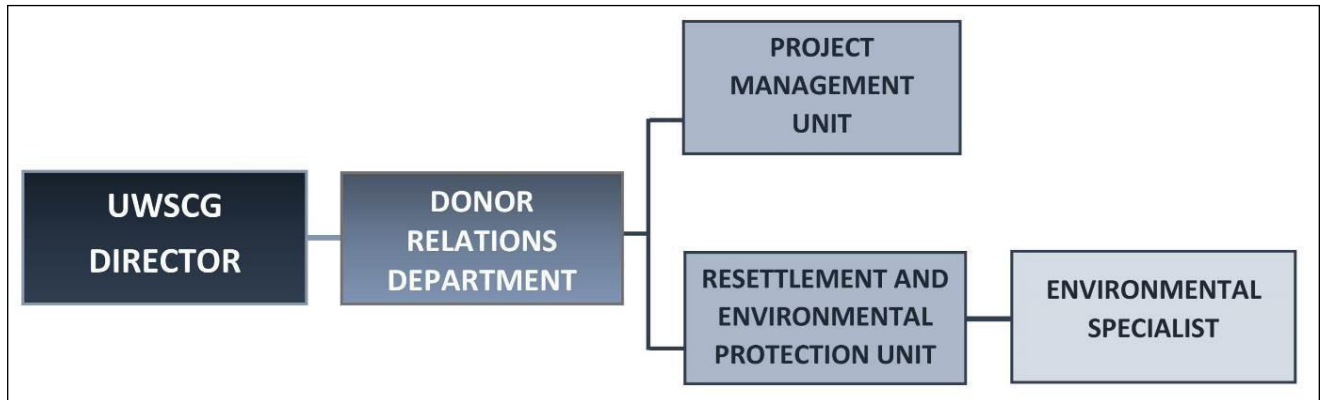
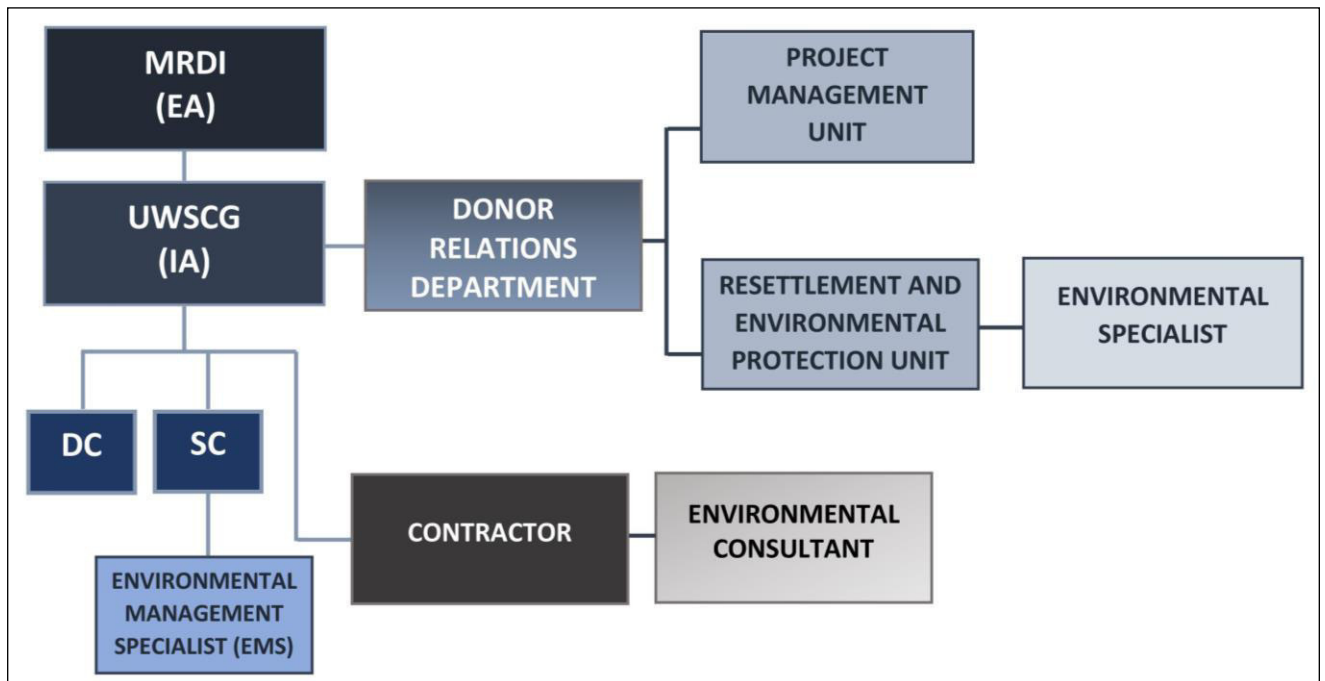


Figure 2: Structure Diagram of the Agencies Involved in Investment Program Implementation



1.3 Relationships with Contractors, Owner, Lender, etc

- 29.** Relationships with Contractors, Owner and Lender are considered as normal working relationships. At the working level, coordination of environmental issues has been satisfactory, the government agencies, UWSCG, consultants and contractors are in frequent communication and consultation.
- 30.** Ministry of Regional Development and Infrastructure (MoRDI) is the Executing Agency (EA) responsible for oversee progress and provide guidance on the Investment Program implementation; convene regular meetings in consultation with the SC and UWSCG; ensure compliance with Investment Program covenants.
- 31.** Oversight of the USIIP with regards to environmental management is the responsibility of the environmental safeguards team, in particular UWSCG/UREP and the Environmental Specialist of USIIP.
- 32.** The team has constant communication with the Supervision Consultant, Contractor, reviews/ comments all environmental reports submitted by DC, SC and contractors.
- 33.** 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.
- 34.** SC is responsible for environmental capacity building, monitoring of implementation of SEMP's and for developing quarterly reports. The Contractor has a full time Environmental Specialist who carries out day to day monitoring and submits monthly progress reports.
- 35.** ADB oversees project sites regularly and gives clear instructions for the project sites improvements with regard to environmental safeguards.
- 36.** To resolve the observed environmental safeguard issues, the regular Environmental Meetings are organized with participation of UWSCG/IPMO/UREP, Eptisa and Contractors. During the meetings environmental issues and implementation of the mitigation measures are discussed.
- 37.** A Grievance Redress Committee has been established within REG-01 in Kutaisi, Poti and Anaklia, to date all grievances have been dealt to the satisfaction of complainants.
- 38.** Contractor of REG-01 package operated during the reporting period with the following sub-contractors:
 - Comremi Ltd (network Kutaisi)
 - Geo Construction Ltd (PRV chambers Kutaisi)
 - Dagi Ltd (asphalt works)
 - Mshenebeli 2000 Ltd (paving stone works)
- 39.** Monthly site meetings have taken place with all Contractors during the reporting period, with a focus on progress and technical problems as well as environmental safeguard issues.
- 40.** Under the REG-01 project contractor has signed agreement with Ltd "Eco-Service" for the bi-annual monitoring measurements (dust, CO, NO₂, SO₂, noise) of all construction sites.
- 41.** Project organization for the awarded contracts listed above is given in the table 2 below.

Table 2: List of contracts under T1

Contract #	Employer	Contractor
Contract No UWSCG/ICB/CW/2011-MES-01	UWSCG	Joint Venture of Dagi LTD - Georgia and Enguri 2006 LTD – Georgia (on April 2013 the name of Enguri 2006 LTD was changed to Enguri - New Construction LTD)
Contract No: UWSCG/ICB/CW-2013-REG-01	UWSCG	Cobra Instalaciones y Servicios SA (from Spain)
Contract No: P43405-ICB-URE-01	UWSCG	JV of Peri Ltd (Georgia) Leading Partner and Slon LLC (Azerbaijan)
Contact No CW/ICB/Office-01	UWSCG	Dagi LTD (Georgia)

PART II - ENVIRONMENTAL MONITORING

- 42.** 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. Monitoring sheets (Mitigation Compliance & Inspection Monitoring Forms submitted by ADB) were filled in on a monthly basis. Also unscheduled monitoring visits were carried out and non-compliance notices have been issued to the contractor as needed. Mitigation measures to reduce major environmental impacts have been instructed to contractors during the monitoring visits.
- 43.** The monitoring activities included:
- The monitoring of compliance of construction activities under Reg-01 project sites to the SSEMP requirements;
 - The monitoring of compliance of construction activities under REG-01 project sites to the overall project EMP;
 - The monitoring of compliance of construction activities under the Ure-01 project sites to the SSEMP requirements
 - The monitoring of compliance of construction activities under the Ure-01 project sites to the overall project EMP
 - Removal of vegetation
- 44.** Environmental Monitoring Specialist hired under the REG-01 subproject conducted the day-to-day monitoring of the construction sites, developed the monthly monitoring reports and submitted to Eptisa.
- 45.** Environmental Monitoring Specialist hired under the URE-01 subproject conducted the day-to-day monitoring of the construction sites, developed the monthly monitoring reports and submitted to Eptisa.

46. Environmental Monitoring Specialist of SC developed quarterly monitoring reports for UWSCG/UREP based on the monthly reports submitted by Contractor, and based on environmental site inspection.
47. ES of UREP performed monitoring of contractor's performance with the approved EMPs and SEMP, 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.
48. 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
49. The following items are monitored during the implementation of the project: (only REG-01 is reported on in this report).
 - Air Quality
 - Noise
 - Vibration
 - Reinstatement of top soil
 - Removal of vegetation/trees for construction
50. 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.

C. Monitoring Measurement Data

KUTAISI, POTI & ANAKLIA Water Supply Infrastructures (Contract REG-01):

51. The Environmental Measurements were carried out by the contractor's environmental expert at various construction sites (reservoirs, pumping stations, network) in Kutaisi and Poti. In particular: a) Kutaisi, Tetramitsa Reservoir, Kutaisi, Vzha-Pshavela Str. 84, Kutaisi TV Tower and networks, Poti, territory near water Supply, Poti, vil.Khorga and Nosiri. The parameters measured for the monitoring data at the construction sites are as follows: dust, carbon monoxide, nitrogen dioxide, sulfur dioxide and noise.

Rehabilitation of Water Supply System in Ureki - T1, T2 T 3 (Contract Ure-01):

52. The monitoring measurements for Ure-01 project was carried out in December 2015 by the National Environmental Agency (See Annex 1). Location and data are included in the table below (Table 3). Four samples were taken on each construction site at different times of the day (09-10 hours of the morning, 12: 00-13: 15: 00-16: 00 and 17: 00-18: 00) in the table below were proposed measurements data during the peak load of equipment and machinery - 12: 00-13: 00 pm. The next monitoring measurements will be conducted in May 2016 and results will be reflected in the next January-June EMRs. According to data received in December 2015

the obtained results did not exceed the National Environmental Standard (Maximum Permissible Level) of Dust, CO, NO₂, SO₂ and Noise, therefore no additional mitigations are required.

Table 3: Monitoring measurements under REG-01 and Ure-01 projects

N	Place of measurement	Coordinates	Results				
			Dusts Mg/m ³	CO Mg/m ³	NO ₂ Mg/m ³	SO ₂ Mg/m ³	Noise db
	National Environmental Standard (Maximum Permissible Level)		0,5	5,0	0,2	0,5	70
Kutaisi Reg-01							
1.	Kutaisi, Tetramitsa Reservoir	N4683582 E309673	0.02	0.21	0,001	<0,1	52
2.	Kutaisi, Vzha-Pshavela Str. 84	N4682535 E309743	0.015	0.15	0.001	<0,1	56
3.	Kutaisi, Rua Str. 1	N4683571 E310994	0.018	0.23	0.001	<0,1	49
4.	Kutaisi, Kldiashvili Str. 104	N4682638 E312274	0.024	0.25	0.002	<0,1	52
5.	Kutaisi, Solomon II, Str.7	N4681770 E311898	0.022	0.31	0,002	0,1	54
6.	Kutaisi TV Tower	N4683429 E313492	0.023	0.20	0.003	<0.1	51
7.	Kutaisi, Leselidze str.9	N4683514 E311868	0.026	0.48	0.012	<0.1	61
10.	Poti, territory near water Supply	N4671946 E720628	0.012	0.96	0.022	<0,1	52
11.	Poti, vil.Khorga	N4678430 E731259	0.15	0.15	0.015	<0,1	52
12.	Poti, vil. Nosiri,	N4683018 E261548	0.11	0.39.	0.02	<0,1	63

Ure-01

Ureki Ure-01

	Tsvermaghala	X 0730415 Y 4649265	0,007	0,13	0,004	<0,1	49,7
	Pipeline in Village Shekvetili	X 0729018 Y 4652172	0,02	0,34	0,008	< 0,1	67,2
	Pipeline in Ureki	X 0729491 Y 4653247	0,006	0,97	0,001	< 0,1	54,8
	Pipeline near River Sepa	X 0729002 Y 4650652	0,008	0,18	<0,001	< 0,1	69,3

D. Removal of vegetation/trees for construction

53. For removal of the red book listed trees at Tetramitsa reservoir under the Reg-01 project the Government of Georgia has issued an Ordinance N1147, "About removal of wooden plants included in the red data list from natural environment", and dated 26th July of 2014, where Government requested UWSCG to develop Compensation Action Plan for damage done to the biodiversity of Georgia. At the same time the MoENRP and its National Forestry Agency has identified a suiting place for planting the trees.
54. As a follow up to these requirements Compensation Action Plan was submitted and agreed with the MoENRP of Georgia in November 2015. Based on this CAP Contractor "Cobra" through its sub-contractor takes responsibility for launching appropriate actions to plant and take care of 50 individual (10 instead of each cut tree) saplings of the same species in suiting environment offered by the National Forestry Agency of MoENRP during the five years.

PART III - ENVIRONMENTAL MANAGEMENT

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

SSEMPs prepared under Reg-01, Ure-01 and Reg-02 projects

SSEMPs under Reg-01 project:

55. The following Site-Specific Environmental Management Plans (SSEMPs) were prepared by the Contractor before commencement of construction activities, revised by SC and approved by UWSCG under the Reg-01 project: Vazha Phshavela (Kutaisi); Kldiashvili (Kutaisi); Tetramitsa (Kutaisi); TV Tower (Kutaisi); Nabada (Poti) and Darcheli (Anaklia).

SSEMPs under Ure-01 project:

56. Contractor "Peri" has developed SSEMPs for Reservoir-01, Reservoir-02 and pumping station before commencement of construction activities, which were endorsed by SC and approved by UWSCG. But finally the construction area for Reservoir-01 was changed to avoid removal of the large number of 100 years old patriarchal trees and in order to ensure the application of these territories for tourism potential in the future. The new territories for construction of

Reservoir-01 is under selection. The new SSEMP for Reservoir-01 will be developed as soon as the new location is selected and design is developed.

57. Preparation of the SSEMP for the well fields will be also launched as soon as the technical solution is defined.

SSEMPs under Reg-02 project:

58. SSEMP for Mestia WTP under the REG-02 project is prepared by contractor/Pfeiffer and submitted to SC. The SSEMP is endorsed by SC and approved by UWSCG.

59. Status of Environmental management plans is summarized in the table 4 below:

Table 4: Status of Environmental management plans

Management Plan	Status	Date of Submission
Environmental Management Plan/Site-Specific EMP (SSEMP) under Reg-01 project, in particular: <ul style="list-style-type: none"> - Vaja-Pshavela reservoir - Tetramitsa reservoir - TW tower - Kldiashvili reservoir 	Submitted, and approved	17.11.2014
Environmental Management Plan/Site-Specific EMP (SSEMP) under Ure-01 project <ul style="list-style-type: none"> - Reservoir #1 - Reservoir #2 - Pumping station 	Submitted, and approved	10.08.2015 SSEMP for Reservoir #1 will be updated after the final location and design is developed and approved
Company Waste Management Plan (according to Geo legislation) to be agreed with MoENRP	Not submitted	February 2016

3.2 Site Inspections and Audits

60. 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 REG-01 project contractor. Mitigation measures were then discussed with the contractor on-site and detailed instructions were given. Good Practice in compliance with Georgian and international H&S legislation were therefore enforced in accordance with the legislation and the Contractor’s contract for REG-01 project.

61. 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.

62. 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).
63. 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.
64. Post Construction Audit for Anaklia Darcheli reservoir under REG-01 project will be carried out by the end of January 2016. The findings and recommendations of the audit will be presented in the next EMR January-June 2016.

3.3 Non-Compliance Notices

REG-01

65. 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, three “Non-compliance notices” were issued by the environmental specialists of Eptisa and UWSCG to the contractor. Main Findings revealed during the monitoring of the sites are described in Table 5 below.
66. The Non-compliance notice was issued based on site monitoring visit executed on 20 August 2015, and 22 October 2015, 2-3 December 2015 (See Annex C).

3.4 Corrective Action Plans

67. 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.

Table 5: Actions taken for implementation of mitigation measures under REG-01 and Ure-01 projects by the end of December 2015

REG-01

Construction Site	Environmental Issues	Action taken
Kutaisi/Vazha Phshavela	Truck wheels cleaning drainage system should be repaired and cleaned regularly to avoid its blockage	Partially Completed
	Fuel/oil spill response items should be available at the site even if there is no high risk of fuel/oil spill	Partially Completed
	Site internally should be arranged properly and cleaned regularly. All construction materials should be properly stored.	Partially Completed
	Hazardous Waste containers should be installed with relevant signs	Partially Completed

	All workers (even personnel of subcontractor) should be equipped with complete PPE	Partially Completed
	Arrange lockable gate in entrance with relevant information signs	Partially Completed
	Non-hazardous waste container should be collected timely to avoid overfilling	Partially Completed
Kutaisi/ Network	All construction materials should be properly segregated and stored adequately to avoid disturbance of residents and businesses!	Not Completed
	Around open tranches proper warning signs and safety types should be installed	Not-completed
	Water should be pumped immediately from the tranche!	Not-completed
	Proper walkways/planks should be installed across open tranches	Not-completed
	All construction materials should be properly segregated and stored adequately to avoid disturbance of residents and businesses!	Not Completed
Kutaisi /Tetramitsa	All trees located at the construction site should be fenced; Site trees should be isolated properly so that there is no risk of its damage;	Not completed
	Household and Hazardous Waste containers should be installed properly with relevant signs;	Completed
	Accumulated waste soil and construction waste should be taken out of the site immediately	Completed
	The crane operating at the site is spilling oil that needs urgent action	Completed
	Accumulated waste soil and construction waste should be taken out of the site immediately	Partially completed
Poti-Nabada	Fuel and lubricants spill elimination items have no special indication sign and sawdust container is empty;	Completed
	Non of workers (even personnel of subcontractor) were equipped with PPE at site even the construction supervisors;	Completed
	Site internally should be arranged properly and cleaned regularly. All construction materials should be properly stored	Partially Completed

	Parking area is arranged but there is NO proper parking sign and vehicles are not parked in right place;	Partially Completed
	Trucks wheel washing relevant platform and its drainage should be installed	Not completed
	Household and Hazardous waste containers does not exist any more!	Completed
	Chlorine container that should be disposed in safe place	Completed
	Surplus soil should be removed from construction site or stored and fenced in proper remote place	Completed

URE-01

Construction Site	Environmental Issues	Action taken
Transmission main	Construction materials should be brought when needed to avoid its long time disposal in the streets	Not completed
	Protect trees to avoid its damage during transmission line construction	Completed
	All open tranches should be fenced with safety lines to avoid accident	Completed
	Accumulated waste soil should be removed from construction area and disposed in a proper place	Completed

68. These issues were captured in project photos and are shown in Annex C (Non-compliance notices).
69. An Annual Environmental Compliance Safeguard Review Mission was carried out on 5 - 8 May 2015 to review environmental safeguards compliance of Tranche 1 project.

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

Table 6:

Project	Specific Issues	Deadline for submission/Implementation	Implementation Status
Status of findings of ADB mission carried out on 5-8 May 2015			
Rehabilitation of Water Supply System in Kutaisi, Poti and Anaklia – T 1			
Reg-01 Kutaisi	Cover trucks with tarpaulins and spraying water on the road to avoid dust generation		Partially improved
	Improvement of traffic management		Partially Improved (Flag

	for avoiding traffic jams at narrow streets around the construction areas		men are periodically used at Vajha-Phavela, 26 May and Gelati streets for improvement of traffic management).
	The Mission requested that CSC conduct inventory to identify specific type of fencing at each site and submit a proposal to UWSCG by end of May 2015.		<p>Inventory for identification of specific type of fencing at each site is carried out based on the understanding that the primary goals of fencing and perimeter walls are to establish a legal demarcation by defining boundaries of a facility by means of barriers that prevent intruders against unauthorized access.</p> <p>However, for the remote facilities goals & objectives may include protecting the facility against vandalism by establishing secure fencing, lighting and surveillance system; if necessary enhanced by provision of intrusion alarms linked to the SCADA system.</p> <p>In Kutaisi, secure fencing applies to TV Tower and Tetramista which is un-manned station situated in remote areas high above the city. Both Tetramisa and TV Tower have problems with roaming cattle's as well as being situated on top of hills often facing severe weather condition. The fencings at both sites will be installed in Feb. 2016.</p> <p>To a lesser degree Vasha Pshavela and Kldiashvili PS fall in the High Security Fence</p>

			category. Both fences are already installed. Poti Nabada falls in the same category and to install 2m high brick wall is under discussion with UWSCG. If approved it will be installed in March 2016.
	Post-construction final environmental audit should be conducted for the completed subprojects, due in July-August, 2015. Audit results will be reflected in project progress reports and EMRs		Contract for caring out environmental Audit for Anaklia Darcheli Reservoir under Reg-01 is already signed with independent Auditor. Findings and recommendations of the report will be proposed in the next January-June EMRs.
	The crack house cases in May 2014 are being resolved. Reinforcement of the wall and house rehabilitation of #9a Koghuashvili str will be completed in end July. The work on foundation reinforcement at #1 Tskaro str will be completed by end of May 2015. Additional geotechnical survey and report has been prepared at Debi Ishkhnelebi str., according which one house can be affected during the transmission pipe works in Kutaisi. The APs of the mentioned house will be relocated and adequate compensation will be paid.		The cases of crack houses in May 2014 are closely followed up, in particular: a) Reinforcement of the wall and house rehabilitation of #9a Koghuashvili str was completed in September 2015 and inhabitants were moved back to the safe house; b) 20-30% of the works on foundation reinforcement at #1 Tskaro str are left and still ongoing (due in Jan.2016), but APs received due compensation; c) Additional geotechnical survey and report has been prepared at Debi Ishkhnelebi str., according which it was clarified that during the transmission pipe works in Kutaisi houses will not be affected and accordingly the APs of the mentioned houses will not be relocated.

	GRM in Kutaisi was established and is operational since April 2014. One complaint received on 7 May 2015 is related to a crack caused by truck vibration. The Mission requested USWCG take immediate action.		One complaint received on 7 May 2015 was related to a crack caused by truck vibration at # 74 Vazha Pshavela str. The Mission in May requested USWCG take immediate action. UWSCG officially applied to CC and CSC to clarify issue. After inspection it was clarified that crack of the house was not caused by trucks belonging to CC/UWSCG, it was caused by the works conducted by the City Hall. CC/SC submitted official letter to UWSCG approving above-mentioned issue.
Reg-01/TW tower			
	Construction site should be kept clean of illegal dumping by other people.		Completed
	Contractor will prepare Landscaping Plan and access road reinstatement plan to submit to CSC for approval before end June 2015.		Under development
Reg-01/Poti	As the construction site is located on the territory of the existing service center of UWSCG in Poti no illegal dumping by other people is possible, therefore the site need to be kept clean from dumping construction debris and scrap metals, by the service center of UWSCG.		Completed
	The washing area need to be maintained		Not competed
Reg-01/Darcheli	Reinstatement activities partly accomplished, additional top-soil will be purchased by CC to finalize restoration activities on the site.		Completed
	Fencing of whole territory fully accomplished by CC. Lightning will		Completed

	be added to the site and access road will be paved.		
Rehabilitation of Water Supply System in Ureki – T1, T2 T 3			
Ure-01	<p>SEMPs 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:</p> <p>SSEMP for R-1</p> <p>SSEMP for R-2:</p> <p>SSEMP for Pumping Station</p> <p>SSEMP for Well Fields</p>	<p>End of May 2015</p> <p>Mid June 2015</p> <p>End June, 2015.</p>	<p>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.</p> <p>But due to the fact that Location and design for Res-#1 is changed now the new SSEMP will be prepared as soon as design is completed</p> <p>Alternative location is considered for Res-02 as well, due to the access road that will be rehabilitated by municipality only by the end of 2016</p> <p>Two options are considered now alternative access road and alternative location for the reservoir (in this case new SSEMP will be developed)</p>
	At the R-1 there are 3 abandoned buildings and 1 local residential house. Consultation with the residents 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.		Written agreement signed by the AP was obtained by UWSCG but as the place is 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		SC and Contractor considered all necessary options to

	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		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 on 7-9 October 2015 by the RETA (ADB) National Environmental Consultant

Rehabilitation of Water Supply System in Kutaisi, Poti and Anaklia – T 1

	Improvement of traffic management for avoiding traffic jams at narrow streets around the construction activities and transportation routes.	May-June, 2015	Flag men were periodically used at different streets for improvement of traffic management.
	Crack houses cases: continued attention (Tskaro str. and Koguashvili str)	June-July, 2015	Reinforcement of the wall and house rehabilitation of #9a Koghuashvili st.was completed in September 2015 and inhabitants were moved back to the safe house; 100% of the works on foundation reinforcement at #1 Tskaro str are implemented and some reinforcement of the Outdoor retaining wall is still ongoing, APs received due compensation.
	GRM: One complaint received on 7 May 2015 is related to a crack caused by truck vibration. The	May, 2015	UWSCG officially applied to CC and CSC to clarify issue. After

	Mission requested USWCG take immediate action.		inspection it was clarified that crack of the house was not caused by trucks belonging to CC/UWSCG, it was caused by the works conducted by the City Hall. It was requested by UWSCG to submit official letter from CC/CSC side approving the above-mentioned situation.
	Compensation Action Plan (CAP) for 5 Red Book trees prepared by CC in April, 2015 in coordination with the MoENRP. Approval of CAP is expected by end of May 2015, followed by implementation.	End of May, 2015	Due to the changes in top management of MoENRP, approval process was delayed, but finally CAP was approved by MoENRP in October 2015.
	There is a need for proper fencing around the reservoirs due to security and sanitary reasons. The Mission requested that CSC (Eptisa Ltd.) conduct inventory to identify specific type of fencing at each site and submit a proposal to UWSCG by end of May 2015.	End of May, 2015	SC Eptisa conducted relevant inventory and proposed specific type of fencing for each reservoir site in Kutaisi. As a result of this action fencing of Vaja-Pshavela (concrete foundation with simple iron fence) is already started and will be finalized in January 2016. Solution is find for fencing of Tetramitsa and TW tower, and Poti Nabada reservoirs, please see comments above.
Rehabilitation of Water Supply System in Ureki – T1, T2 T 3			
	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.

- Potential environmental negative impacts during construction process
- All necessary environmental mitigation measures

Grievance redresses mechanism (GRM)

76. 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. Detail procedures for GRM System is provided in Annex E.
77. As it was mentioned above APs were fully informed through very intensive public consultation process carried out within Reg-01 projects of their rights and of the procedures for addressing complaints whether verbally or in writing during planning and implementation of the project. Up to 8 complains have been recorded during the reporting period under the Reg-01 project in Kutaisi. Complaints were related to the temporarily blocking of the water during the construction activities carried out by Cobra (contractor). Out of 8 cases only three are related to environment and includes blockage of the access road by construction materials and damage of water pipes during the construction of pipes. Local Service center informed the Donor Relations Department and its UREP immediately about the above mentioned complaint. UREP applied to contractor and SC and requested to immediately clean the territory and rehabilitate damaged pipes, all these cases were satisfactorily closed in a very short time. Other cases related to the crack of the houses caused by construction activities and described in details in Table 6 (Status of findings of ADB mission carried out on 5-8 May 2015) of the proposed EMR.

PART IV – CONCLUSIONS AND ACTION PLAN FOR THE NEXT PERIOD

4.1 Conclusions and recommendations

78. As presented in this report, Tranche-1 of this Investment Program is being implemented in compliance with the ADB Safeguards Policy Statement, 2009, National Legislation and overall EARF.
79. Necessary instructions have been given to the Contractor by UWSCG and SC to follow the EMPs and SEMP for REG-01 project.
80. 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 REG-01	Responsible Party
Kutaisi: Networks	
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
Accumulated waste soil should be removed from construction area and disposed in a proper place	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
Kutaisi: Vazha Pshavela Reservoir	
Truck wheels cleaning drainage system should be repaired and cleaned regularly to avoid its blockage	Contractor
Fuel/oil spill response items should be available at the site even if there is no high risk of fuel/oil spill	Contractor
Site internally should be arranged properly and cleaned regularly. All construction materials should be properly stored	Contractor
Hazardous Waste containers should be installed with relevant signs	Contractor
All workers (even personnel of subcontractor) should be equipped with complete PPE	Contractor
Construction waste should be removed timely Arrange lockable gate in entrance with relevant information signs	Contractor
Non-hazardous waste container should be collected timely to avoid overfilling	Contractor
Kutaisi: Kldiashvili Reservoir	
Poti: Nabada Site	
Cover trucks with tarpaulins and spraying water on the road to avoid dust generation	Contractor
Site internally should be arranged properly and cleaned regularly. All construction materials should be properly stored	Contractor
Parking area is arranged but there is NO proper parking sign and vehicles are not parked in right place;	Contractor
Trucks wheel washing relevant platform and its drainage should be installed	Contractor
Recommendations URE-01	
Ureki: Networks	
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	Contractor

construction	
All open tranches should be fenced with safety lines to avoid accident	Contractor
Accumulated waste soil should be removed from construction area and disposed in a proper place	Contractor

4.2 Action Plan for the next period

81. Finalize fencing of Vaja-Pshavela, Tetramitsa and TW tower Reservoirs in Kutaisi.
82. Contractor to update, SC to endorse and UWSCG to approve SSEMPs under the Ure-01 projects for res-01, res-02 and well fields (25 May 2016).
83. Carry out post construction audit of Reg-01 projects in Kutaisi and Poti (May 2015)
84. Develop SSEMP for Office Construction in Tbilisi
85. Conduct monitoring of environmental quality under REG-01 project at each construction site in Kutaisi and Poti with particular reference to dust and noise. The specific plan for measurement is as follows:

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

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

Parameters	Biannual 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 MEASUREMENTS DATA (Reg-01, Ure-01)

(a) atmosferuli haeris sinjebis qimiuri analizisa da xmauris donis gazomvis Sedegebi
Chemical analysis of ambient air samples and noise level measurements (Reg-01)

#	gazomvis adgili	G P koordinateb i	gazomvis Sedegebi								
			Mmtveri mg/m ³ DUST		naxSirbadis monoqsidi (COOOOO) , mg/m ³		Azot. dioqsidi (NO NO ₂), mg/m ³		Gogird.i dioqsidi (SO ₂), mg/m ³		xmauri, db db
			gazomvis Sedegi	zdk	gazomvis Sedegi	zdk	gazomvis Sedegi	zdk	gazo mvis Se de gi	zdk	gazomvi s Sedegi zdk 70
1	q. quTisi, TeTramiwas rezervuari	N4683582 E309673	0.02	0.5	0.21	5.0	0.001	0.2	<0. 1	0.5	52
2	q. quTaisi, vaJa- fSavelas 48	N4682535 E309743	0.015		0.15		0.001		<0. 1		56
3	q. quTaisi, ruas q. #1	N4683571 E310994	0.018		0.23		0.001		<0. 1		49
4	q. quTaisi, kldiaSvillis q. 104	N4682638 E312274	0.024		0.25		0.002		<0. 1		52
5	q. quTaisi, solomon	N4681770 E311898	0.022		0.31		0.002		<0. 1		54
6	q. quTaisi, teleanZis	N4683429 E313492	0.023		0.20		0.003		<0. 1		51
7	q. quTaisi, leseliZis me-2	N4683514 E311868	0.026		0.48		0.012		<0. 1		61
8	foTi, wyalsadenis mimdebare teritoria, uaxloes	N4671946 E720628	0.012		0.96		0.024		<0. 1		52
9	sof. xorga	N4678430 E731259	0.15		0.15		0.015		<0. 1		52
10	sof. nosiri	N4683018 E261548	0.11		0.39		0.02		<0. 1		63

gazomvebi Caatara  /p. WankotaZem/

24.12.2015w.

(b) Ure-01 Environmental measurements done by the National Environmental Agency



№ 12/1-96

26 01 2016

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 მანძილზე 4-ჯერ გაზომილი დამაბინძურებელ ინგრედიენტთა კონცენტრაციის შედეგებს - ხმაურის, ნახშირწყალბადის, ნახშირის დიოქსიდის, აზოტის დიოქსიდის, მტვერის, გოგირდის დიოქსიდისა და გოგირდწყალბადის შემცველობაზე.

დანართი: 2 გვ.

პატივისცემით,

სააგენტოს უფროსი



თამარ ზაგრატია



ინფორმაცია
ატმოსფერულ ჰაერში დამაბინძურებელ ინგრედიენტთა კონცენტრაციის შესახებ
შპს „ფერი“

სინჯის აღების ადგილი, კოორდინატები	სინჯის №	ხმაური, დბ	ნაჯერი ნახშირწყალბადები	კონცენტრაცია მგ/მ ³				გოგირდ დიოქსიდი, SO ₂	გოგირდ წყალბადი H ₂ S
				ნახშირბადის ოქსიდი, CO	აზოტის დიოქსიდი, NO ₂	მტვერი	გოგირდის დიოქსიდი, SO ₂		
წვერმაღალა X 0730415 Y 4649265	1	50.1	0	0.25	<0.001	0.007	<0.1	<0.1	
	2	64.1	<1	0.13	0.002	0.007	<0.1	<0.1	
	3	49.7	0	0.2	<0.001	0.008	<0.1	<0.1	
	4	48.2	0	0.18	<0.001	0.012	<0.1	<0.1	
მილევის უბანი X 0729018 Y 4652172	1	49.8	0	0.17	<0.001	0.03	<0.1	<0.1	
	2	68.9	<1	0.34	0.012	0.02	<0.1	<0.1	
	3	73.4	0	0.8	0.04	0.04	<0.1	<0.1	
	4	67.2	0	0.27	<0.001	0.02	<0.1	<0.1	
ურეკი თავაიშვილის ქ.72 X 0729491 Y 4653247	1	54.8	0	0.97	0.001	0.06	<0.1	<0.1	
	2	71.1	<1	1.37	0.018	0.02	<0.1	<0.1	
	3	72.2	<1	0.83	0.015	0.04	<0.1	<0.1	
	4	71.2	0	0.57	0.021	0.04	<0.1	<0.1	

ANNEX B: PROJECT PHOTOS



REG-01: Kutaisi Transmission Pipelines



Reg-01: Kutaisi Vaja-Pshavela Reservoir



Reg-01: Kutaisi Tetramitsa Reservoir



Kutaisi Reg-01: Rehabilitated house and wall of #9a Koguashvili street



Kutaisi Reg-01: Vaja-Pshavela reservoir, ADB mission carried out on 7-9 October 2015



Reg-01: Kutaisi Nabada Site

ANNEX C: NON-COMPLIANCE NOTICES

NON-COMPLIANCE NOTICE (20 AUGUST, 2015)

NON-COMPLIANCE NOTICE

Project:USIIP	Non-compliance Notice KUTAISI POTI
Contract No:REG-01	
Contractor: COBRA	
Reference: Kutaisi – Network, VajaPshavela sites, TV Tower site, Tetramitsa sites; Poti –Nabada 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**.

General Comment for all sites:

Site internally should be arranged properly and cleaned regularly. All construction materials should be properly segregated and stored adequately.

Non-Compliance in Kutaisi

TETRAMITSASITE

- All trees located at the construction site should be fenced;
- Site trees should be isolated properly so that there is no risk of its damage;



- Household and Hazardous Waste containers should be installed properly with relevant signs;
- Accumulated waste soil and construction waste should be taken out of the site immediately
- Site access and gate should be installed properly
- Vehicles should be parked in only dedicated place

VAJAPSHAVELA SITE

- Fuel/oil spill response items should be available at the site even if there is no high risk of fuel/oil spill;
- All accumulated surplus soil should be taken away from site for its final disposal;

- Hazardous Waste containers should be installed with relevant signs.

TV TOWER SITE

- Site area should be arranged properly and organized in accordance with given instructions
- Household and hazardous Waste containers should be installed with relevant signs
- Site internally should be arranged properly and cleaned regularly. All construction materials should be properly stored

NETWORK

- All accumulated waste soil and construction waste at the road sides should be taken away for its final disposal immediately;
- Enough wooden/metal walkways/planks should be installed across open trenches when passing settlement area;
- Materials for refilling of trenches should be brought to the site when refilling is to start. To leave refilling materials nearby to trenches is NOT acceptable;
- Open trenches should not be left by the end of working day;
- Safety measures, including trench side barriers and special lines should be installed immediately
- Road blinking safety signs should be installed immediately;
- All workers (even personnel of subcontractor) should be equipped with complete PPE

Non-Compliance in Poti

NABADA SITE

- Fuel and lubricants spill elimination items have no special indication sign and sawdust container is empty;
- Non of workers (even personnel of subcontractor) were equipped with PPE at site even the construction supervisors;



- Site internally should be arranged properly and cleaned regularly. All construction materials should be properly stored
- Parking area is arranged but there is NO proper parking sign and vehicles are not parked in right place;
- Trucks wheel washing platform does not exist anymore!
- Household and Hazardous waste containers does not exist anymore!

All site photos:





NON-COMPLIANCE NOTICE (8 OCTOBER, 2015)

NON-COMPLIANCE NOTICE

Project:USIIP	Non-compliance Notice KUTAISI POTI
Contract No:REG-01	
Contractor: COBRA	
Reference: Kutaisi –Tetramitsa site;VazhaPshavelasite; TV Tower site; Poti –Nabada site	

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**.

General comment for all sites:

Site internally should be arranged properly and cleaned regularly. All construction materials should be properly segregated and stored adequately, Site trees should be fenced and protected, Hazardous waste container should be installed

Non-Compliance In Kutaisi

TETRAMITSA SITE

- Site trees should be fenced and protected to avoid its damage
- All construction materials should be properly segregated and stored adequately
- Household and Hazardous Waste containers should be installed properly with relevant signs
- The crane operating at the site is spilling oil that needs urgent action
- Accumulated waste soil and construction waste should be taken out of the site immediately



VAZHA PSHAVELA SITE

- Enough and proper safety signs should be installed on the site
- Proper fuel/oil spill response items should be available at the site as per SEMP
- Hazardous waste container should be installed on the site
- Site internally should be arranged properly and cleaned regularly
- Construction waste should be removed timely
- All accumulated surplus soil should be taken away from site for its final disposal



TV TOWER SITE

- Site internally should be cleaned regularly, and all rubbish should be taken away
- Relevant and enough warning signs should be installed
- All accumulated surplus soil should be taken away from site for its final disposal



Non-Compliance In Poti

NABADA SITE

- All construction materials should be properly stored
- Trucks wheel washing relevant platform and its drainage should be installed
- Chlorine container that should be disposed in safe place
- Proper Household and Hazardous waste container should be available permanently on site

- improperly disposed containers with hazardous materials that should be removed
- Surplus soil should be removed from construction site or stored and fenced in proper remote place
- Site should be cleaned regularly



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

Date of site visits: 07-08.10.15

Irakli Legashvili - Environmental specialist - "Eptisa"

KetevanChomakhidze - Environmental specialist "UWSCG"

NON-COMPLIANCE NOTICE

Project:USIIP	Non-compliance Notice UREKI
Contract No:URE-01	
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"	
KetevanChomakhidze - Environmental specialist "UWSCG"	

NON-COMPLIANCE NOTICE (3 DECEMBER 2015)

NON-COMPLIANCE NOTICE

Project:USIIP	Non-compliance Notice KUTAISI
Contract No:REG-01	
Contractor: COBRA	
Reference: Kutaisi –Tetramitsa site; Vazha Pshavela 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 .	
<u>NON-COMPLIANCE IN KUTAISI</u>	
TETRAMITSA SITE	
<ul style="list-style-type: none"> ▪ Site trees should be fenced and protected to avoid its damage ▪ All construction materials should be properly segregated and stored adequately ▪ Proper Household and Hazardous Waste containers should be installed with relevant signs ▪ Accumulated waste soil and construction waste should be taken out of the site immediately 	



VAZHA PSHAVELA SITE

- Arrange lockable gate in entrance with relevant information signs
- Proper Hazardous waste container should be installed on the site
- Non-hazardous waste container should be collected timely to avoid overfilling
- Personnel should be fully equipped with PPE



All these conditions have to be remedied within four days (by 11.12.2015) by the prime Contractor (Cobra).

Date of site visits: 02-03.12.15	
Irakli Legashvili – Eptisa Environment	
KetevanChomakhidze – UWSCG USIIP	

NON-COMPLIANCE NOTICE (8 DECEMBER 2015)

NON-COMPLIANCE NOTICE

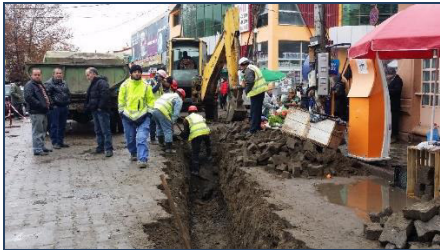
Project:USIIP	Non-compliance Notice KUTAISI
Contract No:REG-01	
Contractor: COBRA	
Reference: Kutaisi –Network	

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

- It is prohibited stay of residents in the excavation zone (all safety norms are ignored)!
- All construction materials should be properly segregated and stored adequately to avoid disturbance of residents and businesses!
- Around open tranches proper warning signs and safety types should be installed
- Water should be pumped immediately from the tranche!
- Proper walkways/planks should be installed across open tranches



All these conditions have to be remedied within one day (by 08.12.2015) **URGENTLY** by the prime Contractor (Cobra).

Irakli Legashvili – Eptisa Environment	
KetevanChomakhidze – UWSCG USIIP	

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

Reference	Requirement	Action to date	Action required/comment
Reg-01 Kutaisi Vazha-Pshavela reservoirs			
	Truck wheels cleaning drainage system should be repaired and cleaned regularly to avoid its blockage	Partially completed	Despite of the numerous instructions given by SC and UWSCG this requirement needs to be improved
	Fuel/oil spill response items should be available at the site even if there is no high risk of fuel/oil spill	Partially completed	Despite of numerous instructions given by EMSs of SC and UWSCG this requirement needs to be improved
	Site internally should be arranged properly and cleaned regularly. All construction materials should be properly stored	Partially completed	Despite of numerous instructions given by EMSs of SC and UWSCG and issues non-compliance notes this requirement needs to be improved
	Hazardous Waste containers should be installed with relevant signs	Partially completed	Despite of numerous instructions given by EMSs of SC and UWSCG this requirement needs to be improved
	All workers (even personnel of subcontractor) should be equipped with complete PPE	Completed	Maintain the same standard
	Arrange lockable gate in entrance with relevant information signs	Partially Completed	Needs improvement
	Non-hazardous waste container should be collected timely to avoid overfilling	Partially Completed	Despite of numerous instructions given by EMSs of SC and UWSCG sometimes non-hazardous waste is not removed timely
Reg-01 Reg-01 project Kutaisi network			
	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

	All open tranches should be fenced with safety lines to avoid accident	Partially Completed	To improve the standard is required
	Accumulated waste soil should be removed from construction area and disposed in a proper place	Partially completed	To improve the standard is required
	Construction materials should be brought when needed to avoid its long time disposal in the streets	Completed	Maintain the same standard
Reg-01 Kutaisi Tetramitsa			
	Site trees should be isolated properly so that there is no risk of its damage	Completed Partially	After verbal and written instruction given by UWSCG and non-compliance notes issued by SC the situation was improved partially
	Household and Hazardous Waste containers should be installed properly with relevant signs	Completed	After verbal and written instruction given by UWSCG and non-compliance notes issued by SC the situation was improved shortly
	Accumulated waste soil and construction waste should be taken out of the site immediately	Completed	
	The crane operating at the site is spilling oil that needs urgent action	Completed	
	Accumulated waste soil and construction waste should be taken out of the site immediately	Partially Completed	After verbal and written instruction given by UWSCG and non-compliance notes issued by SC the situation was improved partially
Reg-01 Poti Nabada			
	Fuel and lubricants spill elimination items have no special indication sign and sawdust container is empty	Partially completed	Despite of issuing of non-compliance notes and numerous instruction given to Contractor's ES, the situation was only partially improved
	Site internally should be arranged	Completed	To keep the same standard

	properly and cleaned regularly. All construction materials should be properly stored		
	Parking area is arranged but there is NO proper parking sign and vehicles are not parked in right place;	Completed	
	Trucks wheel washing relevant platform and its drainage should be installed	Not Completed	Despite of issuing of non-compliance notes and numerous instruction given to Contractor's ES, the situation was not improved
Ure-01 network			
	Construction materials should be brought when needed to avoid its long time disposal in the streets	Partially completed	Site should be organized properly and construction site kept clean
	All open tranches should be fenced with safety lines to avoid accident	Completed	
	Accumulated waste soil should be removed from construction area and disposed in a proper place	Completed	

ANNEX E:

GRM System

Grievance redresses mechanism (GRM)

87. There was no GRM system existing under USIIP before the Reg-01 project. Therefore, there was no structured mechanism and procedure to help the affected population and stakeholders send their grievances related to project-induced environmental impacts and nuisances to UWSCG or directly to the administrative bodies responsible for environmental protection.
88. 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.
89. After issuance of the special order, a GRM was first set up by UWSCG under the REG-01 project of USIIP (operational since April, 2014) that includes rehabilitation of water supply system in Kutaisi. The GRM allows affected people to appeal any disagreeable decision, practice or activity arising from project implementation.

90. 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:
91. 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.
92. 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.
93. When a grievance is solved positively in the first stage, the grievance is closed through an Agreement Protocol, which is reflected in the e-Document – Task Management System.
94. 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
95. The GRC should make a decision within two weeks after the registration of the grievance. The GRC is staffed as follows: (i) Representative of self-government – the head of committee; (ii) Director/ Manager of UWSCG service centre; (iii) Investments Project Management Division representative of the company; (iv) Representative of local authoritative NGO (according to the claim reference); (v) Stakeholders' female representative; (vi) Stakeholders' informal representative; and (vii) Heads of local municipalities.

¹ 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.

²The **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.

96. 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.
97. 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*