

Environmental Monitoring Report

Semestral Report
February 2015

GEO: Urban Services Improvement Investment Program – Project 1

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

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Bi-annual Environmental Monitoring Report

Project Number: 43405-023

July-December 2014

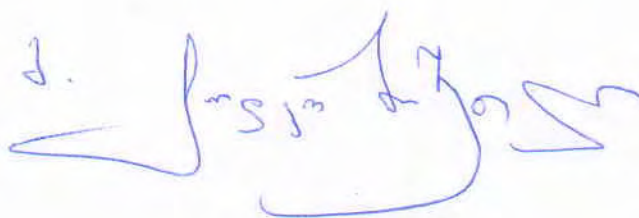
Loan Number 2749-GEO (SF)

**Georgia: Urban Services Improvement Investment Program (Tranche 1)
(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**

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A handwritten signature in blue ink, appearing to read 'M. Goderdzishvili', is written over a faint, circular official stamp.

February 2015

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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	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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I. INTRODUCTION

1. The present Bi-annual Environmental Monitoring Report covers the time period from July till December 2014.
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) and UWSCG Office Building.
6. The following projects are financed under **Tranche 1**:

Mestia Water Supply Headworks (Contract MES-01)

7. 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.

Post Construction Audit

9. A project Compliance Audit was conducted on 1-7 September, 2014. Main findings revealed during the site visits and after review of documents are presented in chapter III - Environmental Monitoring.
10. **KUTAI, 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.
11. United Water Supply Company under the Ministry of Regional Development and Infrastructure of Georgia signed a contract (#UWSCG/ICB/CW-2013-REG-01) with an agreement with Spanish Cobra Instalaciones y Servicios. The Contract was made effective 19 September 2013.
12. **TBILISI Office Building.** Detailed design for construction of a new head office of UWSCG was prepared and funded by GoG. Draft IEE for office building completed and was submitted to ADB. 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. **MESTIA Water Supply Facilities (Contract REG-02).** The scope of works includes: a new water treatment plant (WTP); the rehabilitation of Tsrniashi spring catchment; the rehabilitation of Lanchvali reservoir (1,000 m³); a new reservoir at Lanchvali (1,000 m³); a new high level reservoir (2,000 m³); a new reservoir at water treatment plant (2,000 m³); transmission pipes of approximately 9,200 meters.
15. 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.

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

16. Construction Activities during previous 6 months under REG-01 project (July - December 2014)

KUTAI LOT

REG-01 (KUT)	Kutaisi water distribution networks
Sites	1. Kutaisi - streets

Works Undertaken during July-December 2014	<ul style="list-style-type: none"> 10.649 km of network pipes (PE 63-355mm) laid (23%) 39 no. fire hydrants installed (20%) 40 connections of existing pipes to new network made (80%) 1 no. connection to existing reservoir and PS made (25%) 2,077 water meters (houses) done (34%)
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REG-01 (KUT)	Kutaisi transmission pipelines
Works Undertaken during July-December 2014	<ul style="list-style-type: none"> 2.829 km of water transmission line (DCI 150-400mm) laid (21%)

REG-01 (KUT)	Kutaisi reservoirs & pump stations
Site	TV Tower reservoir
Works Undertaken during July-December 2014	<ul style="list-style-type: none"> 537 m3 of concrete (for reservoir and chlorination unit) poured at TV Tower (62%)
Site	Tetramitsa reservoirs
Works Undertaken during July-December 2014	<ul style="list-style-type: none"> No construction work has started for this investment
Sites	Vazha Pshavela reservoir & pumping station
Works Undertaken during July-December 2014	<ul style="list-style-type: none"> 1,825.5 m3 of concrete (for reservoir and PS) poured at Vazha Pshavela (30%)
Site	Kldiashvili reservoir & pumping station
Works Undertaken during July-December 2014	<ul style="list-style-type: none"> 66.82 m3 of concrete (for PS) at Kldiashvili PS (1%)

ANAKLIA LOT

REG-01 (ANA)	ANAKLIA reservoir and pumping station
Works Undertaken during July-December 2014	<ul style="list-style-type: none"> 909 m3 of concrete (reservoir and PS) poured (44%) 22 m3 of concrete (chlorination unit) poured (44%) 30% of mechanical works done

REG-01 (ANA)	ANAKLIA wells and transmission pipelines
Works Undertaken during July-December 2014	<ul style="list-style-type: none"> 7.97 km of water mains (DCI 400-500mm) laid (46%) No drilling of deep wells done

POTI LOT

REG-1 (POT)	Nabada reservoirs and pump station
Works Undertaken during July-December 2014	<ul style="list-style-type: none"> (Demolition of existing warehouse done during the previous period) Demolition of existing bunker done (100%) 45 m of drilling made for piles (9%)

	<ul style="list-style-type: none"> ▪ 300 m3 of concrete (for PS) done (56%) ▪ 150 m2 of masonry done for PS (77%) ▪ 164 m3 of concrete (for Operation & chlorination bldg.) done (53%) ▪ Completion of masonry works (108 m2) for Operation & chlorination.
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REG-01 (POT)	Poti other sites
Works Undertaken during July-December 2014	<ul style="list-style-type: none"> • No work done at WTP. • No work done at Nosiri well field. ▪ 212 m of connection pipes HDPE 500-1,000mm laid (29%) ▪ 114 m of drainage pipes from PS & reservoir laid (57%) ▪ 42 m of sewerage pipes of operation bldg. laid (21%)

17. Construction Activities during previous 6 months under MES-01 project (July - December 2014)

MES-01

MES-01 (water)	Water Supply Headworks
Works Undertaken during July-December 2014	<p>Only remaining activities done to complete the works were:</p> <ul style="list-style-type: none"> ▪ 2.845 km hydrostatic testing of transmission pipes (26%) ▪ 2.95 km of cleaning and disinfection of transmission pipes (27%) ▪ Completion of interconnection of transmission pipes with existing headworks at Lanchvali

18. The following Site-Specific Environmental Management Plans (SEMPs) were prepared by the Contractor, revised by SC and approved by UWSCG for Kutaisi, Poti and Anaklia Reservoirs & Pumping Stations: Vazha Phshavela (Kutaisi); Kldiashvili (Kutaisi); Tetramitsa (Kutaisi); TV Tower (Kutaisi); Nabada (Poti) and Darcheli (Anaklia).

B. Changes in Project Organization and Environmental Management Team

(i) Agencies Involved in Investment Program Implementation

19. 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.
- 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 Investment Projects Management is established within the UWSCG for all Investment Program related functions. The IPMO coordinates construction of subprojects, and ensures consistency of approach and performance.
- 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.

- 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. SC/EMS conducts routine observations and surveys, prepares quarterly environmental reports and submits these to UWSCG.
- The Contractor has the following obligations:
 - to prepare SEMP;
 - to employ Environmental Consultant responsible for developing and implementing the construction phase SEMP 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;
- DC is responsible for developing and incorporation of mitigation measures in design and construction.
- The environmental specialist (ES) is hired by UWSCG under the USIIP to assist and advise the Division of Resettlement and Environmental Protection (DREP) 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 DREP in EARF implementation, in particular, reviewing IEE/EIA Reports and overseeing implementation of EMP/SEMPs and in training and capacity-building activities. The ES prepares bi-annual and annual environmental monitoring reports and submits to ADB.
- DREP is responsible for the implementation of mitigation and monitoring measures during construction and operation of subprojects under USIIP. Currently DREP is staffed with a Head of Division, who is responsible for both resettlement and environmental issues, and the Resettlement Specialist.
- ADB is the donor financing the Investment Program.

Environmental management organization is shown in Figure 1 and Figure 2.

(ii) Structure Diagrams of the Project's Environmental Management System

Figure 1. Structure Diagram of the Environmental Management Unit of UWSCG

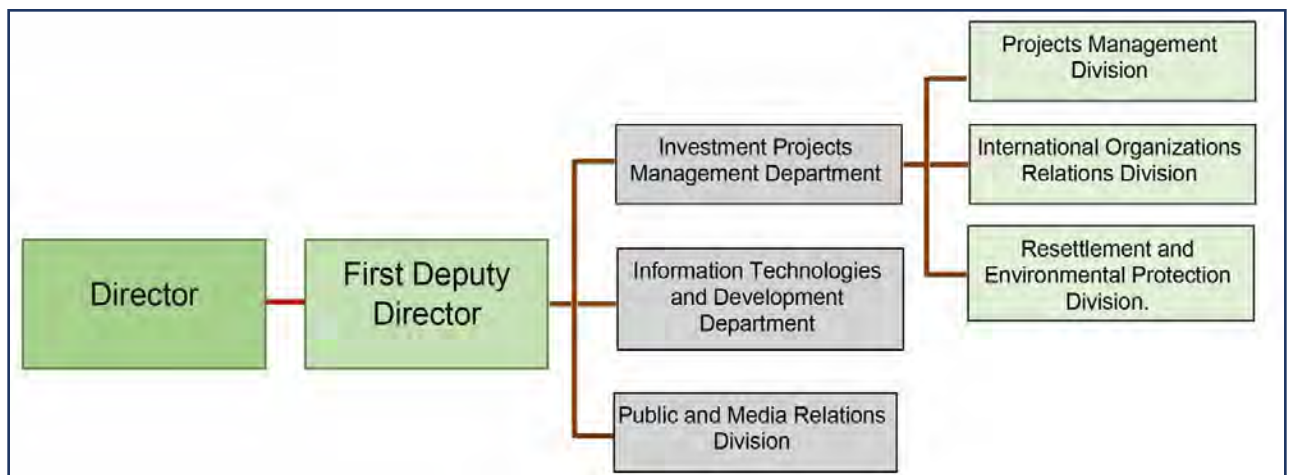
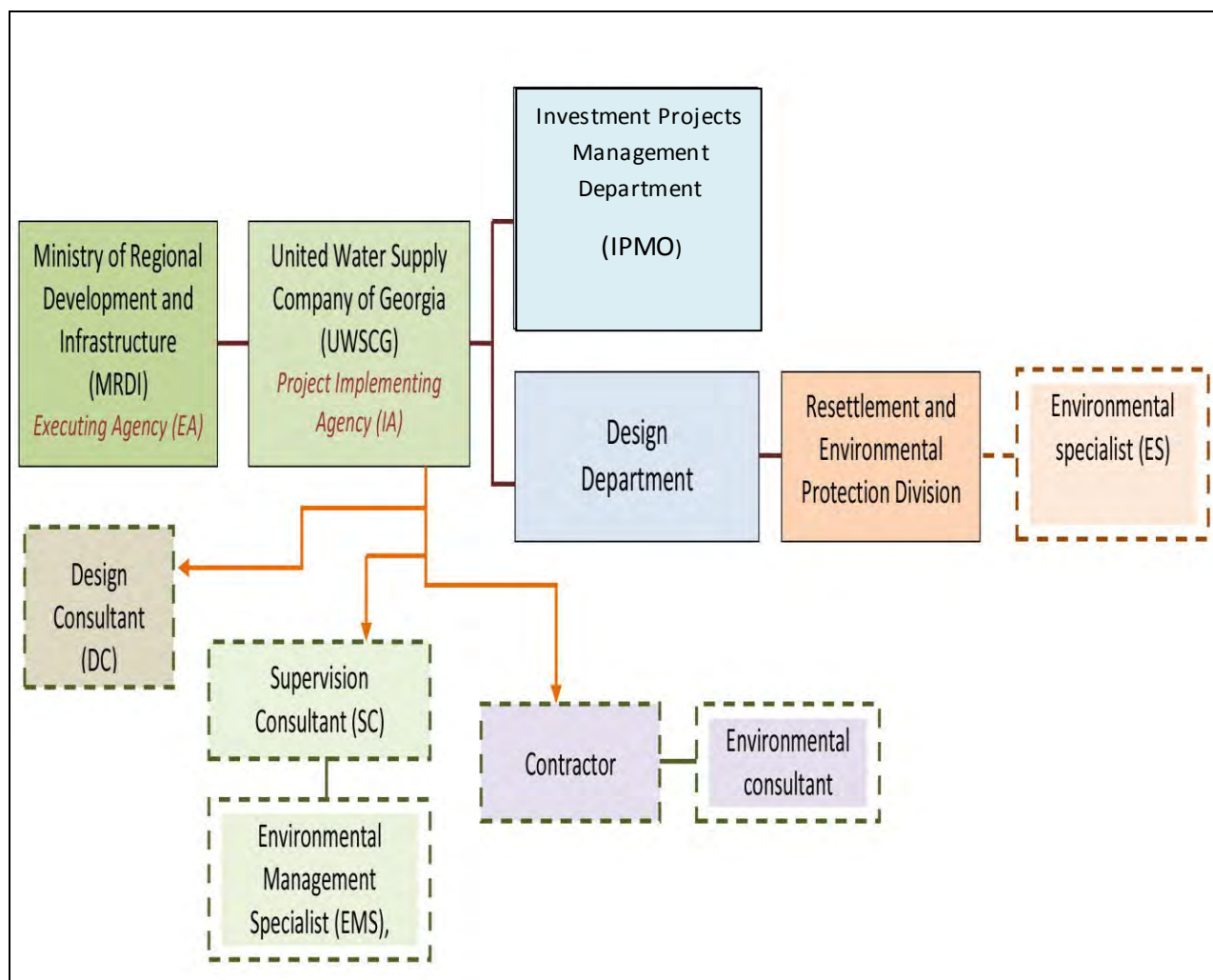


Figure 2. Structure Diagram of the Agencies Involved in Investment Program Implementation



C. Relationships with Contractors, Owner, Lender, etc

20. 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.
21. Ministry of Regional Development and Infrastructure (MoRDI) is the Executing Agency (EA) responsible for oversee progress and provide guidance on the Investment Program implementation; convene regular meetings in consultation with the SC Chairperson and UWSCG; ensure compliance with Investment Program covenants.
22. Oversight of the USIIP with regards to environmental management is the responsibility of the environmental safeguards team, in particular UWSCG/DREP and the Environmental Specialist of USIIP.

23. The team has constant communication with the Supervision Consultant, Contractor, reviews/ comments all environmental reports submitted by DC, SC and contractors.
24. In fact the SEMP has been approved by UWSCG/DREP 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.
25. SC is responsible for environmental capacity building, monitoring of implementation of SEMP and for developing quarterly reports. The Contractor has a full time Environmental Specialist who carries out day to day monitoring as submits a monthly progress reports.
26. ADB oversees project sites regularly and gives clear instructions for the project sites improvements with regard to environmental safeguards.
27. To resolve the observed environmental safeguard issues, the regular Environmental Meetings are organized with participation of UWSCG/IPMO/DREP, Eptisa, Contractors. During the meetings environmental issues and implementation of the mitigation measures are discussed.
28. A Grievance Redress Committee has been established within REG-01 in Kutaisi, Poti and Anaklia but to date all grievances have been minor, and have been dealt locally to the satisfaction of complainants.
29. Contractor of MES-01 package operated during the reporting period with one sub-contractor for the erection of the key bridge crossing, "NODARI CONSTRUCTION" LLC (license data not received).
30. Contractor of REG-01 package operated during the reporting period with the following sub-contractors:
 - Becker Group Development Ltd (reservoirs in Kutaisi) (Spanish)
 - Espaneti LLC (TV Tower & Tetramitsa reservoirs - both in Kutaisi)
 - PRIME CONCRETE LLC (civil works reservoirs Anaklia and Nabada Poti)
 - Georgian Plastic LTD (Network Kutaisi)
 - BTB (mechanical works All sections (Turkish)
31. 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.
32. Under the REG-01 project contractor has signed agreement with National Environmental Agency for the bi-annual monitoring measurements (dust, CO, NO2, SO2, noise) of all construction sites.
33. Project organization for the awarded contracts listed above is given in the table below.

Contract #	Employer	Contractor
Contract-1 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 Number: UWSCG/ICB/CW-2013-REG-01	UWSCG	Cobra Instalaciones y Servicios SA (from Spain)

II. ENVIRONMENTAL MONITORING

34. Individual and joint on-site monitoring activities were conducted by Environmental Monitoring Specialist of SC and Environmental Specialist of DREP under USIIP on a regular basis, during the period July-December 2014. Monitoring sheets (MITIGATION COMPLIANCE & INSPECTION MONITORING FORMs submitted by ADB) were filled in on a monthly basis. Unscheduled monitoring visits were carried out and non-compliance notes has been issued to the contractor as needed. Mitigation measures to reduce major environmental impacts have been instructed to contractors during the monitoring visits.
35. The monitoring activities included:
- The monitoring of compliance of construction activities under Reg-01 and MES-01 project sites to the SSEMP requirements;
 - The monitoring of compliance of construction activities under REG-01 project sites to the overall project EMP and to individual SSEMPs requirements;
 - Environmental monitoring of noise, vibration, air quality under the REG-01 project;
 - Removal of vegetation
36. 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.
37. Environmental Monitoring Specialist of SC developed quarterly monitoring reports for UWSCG/DREP based on the monthly reports submitted by Contractor and on environmental site inspection.
38. ES of DREP 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.
39. 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:
- Contractor's mobilization and site installation
 - Excavation works
 - Removal of soil
 - Backfilling of trenches
40. The following items are monitored during the implementation of the project: (only MES-01 and REG-01 are reported on in this report).
- Air Quality
 - Noise
 - Vibration
 - Reinstatement of top soil
 - Removal of vegetation/trees for construction

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

A. Monitoring Measurement Data

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

42. In order to monitor measurements under the REG-01 project, Contract was signed between the Contractor and the National Environmental Agency (NEA).
43. The parameters measured for the monitoring data at the construction sites are as follows: dust, carbon monoxide, nitrogen dioxide, sulfur dioxide and noise. The measurements were carried out at various construction sites (reservoirs, pumping stations, network) in Kutaisi, Anaklia and Poti.
44. The monitoring measurements were carried out in December 2014, while final results were submitted to Cobra in January 2015 (See Annex 1). Location and data are included in the table below (Table 1). The next monitoring measurements will be conducted in mid June 2015 and results will be reflected in the next EMRs. According to data received in January 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 1: Monitoring measurements under REG-01 project

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
1	Kutaisi, Vazha-Pshavela Str.52	N 42°16'18.7'' EO 2°41'33.1''	0,005	0,24	0,001	<0,1	43,1
2	Kutaisi, Chamchabadze str.93	N 42°16'27.8'' EO 42°41'47.7''	0,141	0,44	0,001	<0,1	69,4
3	Kutaisi, Rua str.1	N 42°16'53.7'' EO 42°42'28.2''	0,003	0,18	0,001	<0,1	45,8
4	Kutaisi, Kldiashvili str.87	N 42°16'24.3'' EO 42°43'24.8''	0,08	0,71	0,002	0,1	43,1
5	Kutaisi, Solomon II str.8	N 42°15'52.6'' EO 42°43'13.7''	0,007	2,09	0,009	0,1	59,2
6	Kutaisi, at the TV tower	N 42°16'48.8'' EO 42°44'05.0''	0,022	0,41	0,004	<0,1	64,3
7	Kutaisi, Leselidze str. 2 nd corner	N 42°16'54.2'' EO 42°43'02.1''	0,177	0,45	0,013	<0,1	53,7
8	Anaklia, near reservoir	N 42°45'59.1'' EO 42°40'49.8''	0,001	0,01	0,001	<0,1	38,3
9	Anaklia, road, vil. Darcheli	N 42°26'18.3'' EO 42°41'22.7''	0,011	1,02	0,008	<0,1	46,5
10	Poti, territory near water	N 42°10'06.8''	0,003	2,01	0,32	<0,1	49,8

	Supply	EO 42°40'19.8"					
11	Poti, vil.Khorga	N 42°13'54.6" EO 42°47'50.0"	0,004	1,21	0,006	<0,1	57,6
12	Poti, vil. Nosiri, near water supply	N 42°16'14.6" EO 42°04'26.3"	0,001	0,04	0,001	<0,1	42,5

B. Removal of vegetation/trees for construction

45. In order to carry out ecological assessment of the territory where the reconstruction of Tetramitsa reservoir (REG-01, Kutaisi) will take place, a biodiversity survey was carried out by the independent consultant.
46. On the bases of recommendations provided in biodiversity cutting of the Red Book Lists: - Imeretian Oak and Zelkova trees were minimized by changing a layout plan/alignment of the project; however, 5 red book trees were removed during the construction. All other construction and preparatory works (material storage) will be conducted on lands where there is no vegetation.
47. Prior to construction, all Red List trees were marked with warning tape and fenced where necessary in order to ensure their preservation.
48. In parallel, according to the national regulations, UWSCG obtained a permit from the MoENRP for cutting 5 Red Book Oak Trees on 26 June 2014 (Decree No.1147).
49. Based on this letter, in order to compensate for the felled trees, Contractor will develop Compensation Action Plan within the February 2015, in coordination with the MoENRP. Compensation Action plan and further activities will be provided in the next EMR.

III. ENVIRONMENTAL MANAGEMENT

A. Site Inspections and Audits

50. 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. 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.
51. 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. 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.
52. Site monitoring visits during the reporting period have been carried out on: 3, 17-18 and 28 July, 2014, 25 September, 2014, 10 October 2014, 14-15 November 2014, December 18-19, 2014. Monitoring Compliance and Inspection monitoring forms have been filled in during the site visits and are attached to this report (Annex C).
53. The contractors were always informed on the detected non-compliances and were demanded to improve on the deadline set and send photos of improvements made. 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 B).

54. A summary of the identified issues during the site monitoring by EMS/SC and USIIP ES, recommended mitigations and the status of implementation is presented in Annex C:
55. **Mes-01 project Compliance Audit** was carried out on 1-7 September of 2014. The Compliance Audit Report was prepared to comply with the 2009 ADB's SPS and Georgian legislation, including Safeguards Requirement and aims to identify past and present concerns from the production and business activities of Project Company that related to impacts on environment.

Main Findings Revealed during the Documents Review and Site Visits

56. Based on the projects documents review and conducted site visits the Consultant (Audit Team) revealed the following general findings:
- The main beneficiaries of the improved system were the citizens of Mestia who was provided with a constant supply of better quality water, which serves a greater proportion of the population, including urban poor (and tourists as well). This improve the quality of life of people as well as raising standards of both individual and public health as the improvements in hygiene reduced the incidence of disease associated with poor sanitation. This lead to economic gains as people away from work less and will spend less on healthcare, so their incomes will increase;
 - In terms of environment at the project implementation stage strong negative impact on environment was not expected. According to the ADB instructions the project fell under Category B. According to Georgia legislation Environmental Impact Assessment document preparation and obtaining relevant permit was not necessary for project implementation;
 - All documents developed under the project (Loan Agreement, PAM, Contracts) included the obligation to implement the project according to the ADB SPS 2009 as well as pursuant to the environmental requirements stipulated in Georgia legislation;
 - No incidents have occurred during the construction stage and no complaints have been initiated by the residents;
 - All project implementing units had hired environmental specialist with relevant qualifications;
 - At the project implementation stage permanent trainings were held for contractor, as well as those specialists of all organizations involved in the project that dealt with environmental issues;
 - Under the project UWSCG and SC environmental specialists performed permanent environmental monitoring during spring to autumn seasons. Non-compliances identified by them adequately and corrective actions were planned. The effectiveness of corrective actions were also controlled by the above-mentioned specialists;
 - If we do not consider the small section (on the territory adjacent to the new reservoir), restoration works have been performed satisfactorily. According to the explanation of contract restoration works have been performed on the mentioned section, but it is impossible to visually see the result. Notably, there exists photo material about conducting restoration works on the mentioned territory;
 - Inert waste has not been produced in large quantities during the construction process. Inert waste was derived in the course of project works just on the territory of the construction of a new reservoir and the mentioned waste was fully used on the new reservoir territory, in the process of covering the reservoir with soil according to the technical design;

- Contractor has opened a new storage construction camp under the mentioned project and before starting construction activities (including better management of construction camp, hazardous and household waste management, safe storage of fuel containers, etc) contractor updated an Environmental Management Plan.

Recommendations:

- Along with the above-mentioned findings the Consultant made the following recommendation:
- In 2015, SC has to carry out additional environmental audit of the mentioned territory in order to determine the effectiveness of conducted restoration works.
- More detailed recommendations with indication of the entities responsible for their implementation as well as the terms of recommendations implementation are provided in the Table below.

Table 2: Recommendations Matrix

#	Recommendation	Responsible for Audit	Implementation Terms	Implementation deadline	Responsible for restoration
1.	Determine the degree of effectiveness of restoration works carried out on the territory adjacent to the new reservoir.	UWSCG and Eptisa: Will carry out environmental audit of the territory adjacent to the new reservoir in order to determine effectiveness of conducted restoration works.	The audit has to be conducted in late spring, 2015.	Before defect liability period (July 2015)	Contractor

B. Non-compliance Notices

REG-01

- 57.** 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.
- 58.** The Non-compliance Notices were issued based on site monitoring visits executed in the following dates: 18 July 2014; 25 Sept. 2014; 14-15 Nov. 2014. All issued non-compliance notices are attached to this document (See Annex B).

C. Corrective Action Plans

- 59.** For the purpose of resolving the observed issues, the regular Environmental Meetings were initiated with the participation of UWSCG/IPMO/DREP, 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 3: Actions taken for implementation of mitigation measures under REG-01 project by the end of 31 December 2014

REG-01

Construction Site	Environmental Issues	Action taken
Kutaisi/Vazha Phshavela	Household and hazardous Waste containers should have clear sticker mentioned "Household Waste" and regularly collected by the waste collection service	Completed
	The standard and relevant warning signs should be installed on the entrance gate	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
	All accumulated surplus soil should be taken away from site for its final disposal;	Completed
	Construction area should be cleaned and organized regularly.	Partially Completed
	Trees located at the construction site should be fenced and preserved properly	Completed
Kutaisi/Kldiashvili	All trees located at the construction site should be fenced;	Partially Completed
	Household and Hazardous Waste containers should be installed in proper place with relevant signs;	Completed
	Site internally should be arranged properly and cleaned regularly. All construction materials should be properly segregated and stored adequately;	Partially Completed
	Accumulated waste soil and construction waste should be taken out of the site immediately	Completed
	Proper site fencing needs to be arranged	Partially Completed
Kutaisi/ Network	The surplus/waste soil should be stored separately for further use at the dedicated place to avoid disturbance of the population, if trenches are left open more than 24 hours	Partially Completed
	Installed walkways by Cobra not corresponding the standards and instructions given to Cobra by Environmental Specialists	Partially completed not always following the standards
	Cover trucks with tarpaulins and spraying water on the road to avoid dust generation	Completed
	The adequate lightening of tranches should be	Partially completed not

	provided with relevant signal lights;	following the standards
	All accumulated waste soil and construction waste at the road sides should be taken away for its final disposal immediately;	Partially completed
	Refilling/compaction and reinstatement process should bring site at the same condition as it was before construction	Completed partially
Poti/Nabada	Household Waste container should have clear sticker mentioned "Household Waste" and regularly collected by the waste collection service Cover trucks with tarpaulins and spraying water on the road to avoid dust generation	Completed
	Hazardous Waste container should be installed in proper place	Completed
	Proper fencing of left site with relevant material (several times instructed by ADB, Eptisa, UWSCG) site not to be visible	Partially completed, not corresponding the standards given by Eptisa and UWSCG
	The chlorine container should be disposed in safe place urgently;	Completed
	Fuel and lubricants spill elimination items have no special indication sign and sawdust container is empty;	Partially completed
	All workers (even personnel of subcontractor) should be equipped with complete PPE;	Completed
Anaklia/Darcheli	Parking area is arranged but there is NO parking special sign "Parking Area" that was available before;	Completed
	On site, construction equipment and vehicles should be kept in safe environment and in proper place;	Completed
	Site internally should be arranged properly and cleaned regularly. All construction materials should be properly segregated and stored adequately	Partially completed
Anaklia/transmission main	The adequate lightening of tranches should be provided with relevant signal lights. At the roads blinking signs should be installed;	Not completed
	The surplus/waste soil along to tranches should be stored at specially allocated place for further use;	Completed
	Workers should wear complete PPE;	Partially completed
	Materials for refilling of tranches should be brought to the site when refilling is to start. To leave refilling materials nearby to tranches is NOT acceptable	Not completed
TV Tower site	Construction area should be fenced properly Relevant warning signs should be installed	Partially completed
	Household and hazardous Waste containers	Completed

	should be installed in proper place with relevant signs	
	Accumulated waste soil and construction waste should be taken out of the site immediately	Completed
	On site, proper storage and parking area should be arranged	Completed
	Site area should be arranged properly and organized in accordance with given instructions, including internal access roads (at least graveled to avoid mud roads)	Not completed

60. These issues were captured in project photos and are shown in Annex C (Non-compliance notices).
61. A loan Environmental Safeguard Review and Reconnaissance mission was carried out on 27 July – 2 August of 2014 to review environmental safeguards compliance of Tranche 1 and Tranche 2 projects.

Actions taken to reflect the findings of ADB mission in August 2014:

62. Monitoring activities carried out by SC and UWSCG/DREP within the reporting period were closely linked with mission's findings that provides clear statement for further actions to be taken to improve environmental safeguard of Reg-01 and Mes-01 projects.
63. Mission visited and reviewed on-going construction works under Reg-01 and Mes-01 project in Kutaisi, Poti and Mestia, in particular, Vazha Pshavela and Kldiashvili reservoirs and pumping stations and network in Kutaisi, Poti (Nabada) reservoirs and pumping stations, transmission line and Lanchvali reservoir and chamber site in Mestia. Mission found that Lanchvali reservoir was not corresponding the safeguard requirements with no fencing and cows within the sanitary protection zone. Mission requested corrective actions to be taken by contractor before 15 August 2014. As a response to this requirement the corrective actions have been undertaken by contractor, the reservoir was fenced and pictures were recorded to ADB for evidence.
64. Revised IEE for Tbilisi Head office building, per ADB's comments have been provided to ADB in August 2014.
65. On site trainings have been carried out in Mestia to make GRM system functional. The local service center's staff have been introduced to the complaints registration log, how to fill the complaints log. Grievance Redress Committee was established in Mestia as well.
66. Post construction Audit reports were conducted for Tranche 1 project and submitted to ADB within the planned time schedule.
67. A comprehensive public awareness activities have been carried out in Mestia explaining the GRM to the local population and is provided in details in chapter D-Consultations and compliance.
68. Poti Nabada – the proper fencing of the site along the street with residential houses was requested by ADB during the Mission before the commencement of construction of two new reservoirs by the end of 2014. Corrective actions have been taken by contractor after numerous additional instructions given by UWSCG and Eptisa and issuance of non-compliance notes. Finally construction area was fenced, using the proper materials that is

not visible from residential houses, however UWSCG and Eptisa has additional remark with the length of the proposed fencing and requested additional corresponding actions.

69. GRM Kutaisi was established and is operational since April 2014. The details of GRM operation are described in GRM section below.
70. All recommended actions have been implemented during the reporting period to resolve issue with damaged Houses caused by the Transmission pipe works in Kutaisi. Additional geotechnical investigation has been carried out and Property of APs has been calculated. Resettlement Action plan was developed for allocation of APs.

Actions taken regarding the action plan of the EMR January-June 2014:

71. During the reporting period active public consultation and awareness raising activities were conducted under Reg-01 and Mes-01 projects to keep the beneficiaries informed and consulted on project progress and results. Detailed information about carried out activities presented below.
72. Contractor has finalized SSEMPs under Reg-01 for Tetramitsa and TV reservoirs and pumping station. Both SSEMPs were endorsed by SC, approved by UWSCG and sent to ADB.
73. Monitoring Measurements were carried out by Cobra in January 2015. Measurement results are presented in Table 2.
74. As it was described above Post Construction Audit was conducted for Mes-01 project by the independent auditor, the main findings of the report are presented in paragraph 56.

D. Consultations and Complaints

Public Awareness Activities:

Kutaisi water supply and sanitation rehabilitation project

- (A) During the reporting period active public consultation and awareness raising activities were conducted in Kutaisi in line with the Kutaisi public awareness strategy to keep the beneficiaries informed and consulted on project progress and results.

Door to door campaign

- (B) In July 2014 special information letters were developed to provide more than 800 customers of UWSCG living near the construction sites in Kutaisi with the information about the project as well as planned activities on their respective streets and the planned timeline for the rehabilitation works to make sure that the population is aware of the possible hindrances they might experiences during the construction works.
- (C) At the end of July 2014 the local NGO “Hera” was selected on a competitive basis to conduct the planed PA activities in Kutaisi. Eptisa PA consultants provided training for Hera representatives in conducting PA activities, shared with them the best practices and lessons



learned as well as necessary tools for implementing door to door campaign and consultation meetings.

- (D) The special brochure was developed and printed which included information about the project and its timeline, importance of the safe water supply and had a special FAQ (frequently asked questions) section where population could get instant replies on the most frequently asked questions. The brochure also included the UWSCG hotline and other contact details and information about Grievance Redress Committee.
- (E) Intensive door to door campaign in Kutaisi started in August 2014. It includes both Consultations with local community about the possible environmental concerns caused by project, as well as Specially trained representatives from the NGO “Hera” under the supervision of Eptisa and UWSCG were delivering brochures to the affected households and informing them about the project and planed timeline of the rehabilitation works. More than 2000 affected households received the brochure on Tamar Mepe, Tkibuli, Nekrasov, Gelati, Solomon I, Kupradze, Kldiashvili and other nearby streets where the rehabilitation works are ongoing or will commence in the nearest future. The door to door was continued till mid-October and covered around 4000 affected households in Kutaisi.

Consultation meetings

- (F) In parallel with the door to door campaign three consultation meetings with population were held in September to communicate the project progress update with the population and answer their questions.



- (G) The consultation meetings were held on 23, 25 and 27th September and were attended by the affected households as well as the community leaders, media and opinion makers. The attended population was greeted by the UWSCG manager and local government representatives. Detailed presentation about the project, its progress and update on the ongoing and planned rehabilitation works was delivered by the representative of the construction company “Kobra”.
- (H) Presentations were followed by open discussion where attended population had a chance to ask the questions and receive comprehensive information on project related issues. The main questions asked by the audience concerned the timeline of the rehabilitation works and who will take care of the roads infrastructure after the water supply rehabilitation is over. The meetings were actively covered by local media outlets in their daily news programs.

Media campaign

- (I) In consultations with Eptisa and UWSCG NGO “Hera” developed a special video Ad for the media campaign in local TV station Rioni. The video Ad includes information about the project, donors and implementing entities as well as the project results and timelines. The TV Ad was shown on local TV station Rioni, which enjoyed the highest ratings among all the local TV stations in Kutaisi.

Mestia water supply and sanitation rehabilitation project

- (J) During the reporting period the UWSCG with the help of Eptisa PA specialists tried to recruit a relevant NGO in Mestia to conduct the PA activities as outlined in Mestia PA strategy. As the qualified NGO in Mestia could not be found the UWSCG/DREP and Eptisa decided to conduct the PA activities on their own. In August a special brochure was developed for Mestia water supply rehabilitation project which includes the information about the project, its

progress, results and timeline as well as the importance of safe water supply and sanitation along with FAQ.

- (K) In September representatives from UWSCG/DREP, UWSCG marketing and PR departments conducted an intensive door to door campaign in Mestia under the supervision of Eptisa local PA consultant. Up to 1000 households in Mestia were able to receive comprehensive information on project progress and results. They also were provided with all necessary contact details the affected households can use, including Grievance Redress Mechanism and Grievance Redress Committee in case of any questions or complaints.
- (L) The second phase of PA activities including door to door meetings and consultation meetings with the population are planned after the rehabilitation works are completed.

Grievance redresses mechanism (GRM)

- 75.** A GRM was established for REG-01 project and is operational since April 2014. The system operates on a 3-stage:
- 76.** On the first stage complaints are discussed within two weeks of reception by the local service center of the UWSCG Kutaisi office, based on shareholders verbal or written complain. On the first stage of grievance authorized representative of local service center is responsible to ensure claim registration and its further processing.
- 77.** On the second stage of grievance if the problem is not solved within two weeks, shareholder has right to apply to the committee which will make decision within two weeks after the registration of the form. The GR Committee is staffed the following way:
 - Representative of self-government – the head of committee;
 - Director/ Manager of United Water Supply Company of Georgia Service Center;
 - Investments Project Managementt Division representative of the company;
 - Representative of local authoritative NGO (according to the claim reference);
 - Shareholders' female representative;
 - Shareholders' informal representative;
 - Heads of local municipalities
- 78.** On the third stage of grievance if the problem is not solved, shareholder can apply to ADB at a given 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***

79. 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 20 of minor complains have been recorded within the reporting period (July-December 2014) under the Reg-01 project in Kutaisi. The complaints mainly related to the temporarily blocking of the water during the construction activities carried out by Cobra (contractor). All received written complaints were discussed by the local service center in Kutaisi on the first stage and were dealt with immediately to the satisfaction level. Hence, no complaints were brought to the attention of the Grievance Redress Committee.
80. As it was reported in previous EMR of January-June 2014 there were several houses damaged in Kutaisi as a result of tranches excavation works in scope of REG-01 Project. The works were stopped immediately in the damaged areas. UWSCG together with the Supervisor Consultant (EPTISA) evaluated situation, identified Affected Persons (APs) needing temporary resettlement elaborated relative compensation plans and remuneration matrixes and drafted corresponding documents Emergency Temporary Resettlement Framework (ETRF), Temporary Resettlement Plan Contract (TRPC) and other relevant documents all according to ADB SPS 2009 and the recommendations of ADB Safeguards Specialists.
81. Hence, in September 2014 the urgent relocation was conducted (1 AP at #9a Koghuashvili str., Kutaisi; affected household of Mr. Anton Putkaradze) in order to substantially rehabilitate the damaged house and move the inhabitants back to the safe and accommodated property.
82. Another urgent relocation – that of #1 Tskaro str., Kutaisi, affected household of Mrs. Mzisa Gzobava – was performed later (in January 2015) due to refusal of the APs on relocation (the affected house is in emergency situation and might collapse and injure the inhabitants; therefore, a forceful emergency temporary relocation has been conducted which entirely corresponded all relevant ADB and Georgian Legislation requirements).
83. These houses will be rehabilitated in Q1 2015.

IV. CONCLUSIONS AND RECOMMENDATIONS

84. 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.
85. Necessary instructions have been given to the Contractor by UWSCG and SC to follow the EMPs and SEMP for REG-01 and MES-01 subprojects.

Table 4: Recommendations to address Environmental Issues

Recommendations REG-01 Kutaisi: Streets	Responsible Party
The surplus/waste soil should be stored separately for further use at the dedicated place to avoid disturbance of the population, if trenches are left open more than 24 hours	Contractor
Relevant wooden/metal walkways/planks should be installed across open tranches when passing settlement area	Contractor

Cover trucks with tarpaulins and spraying water on the road to avoid dust generation	Contractor
The standard fixing should be used for warning signs or safety tape	Contractor
Refilling/compaction and reinstatement process should bring site at the same condition as it was before construction	Contractor
Kutaisi: Vazha Pshavela Reservoir	
Construction area should be cleaned and organized regularly.	Contractor
Trees located at the construction site should be fenced and preserved properly	Contractor
“Household Waste” regularly collected by the waste collection service	Contractor
The standard and relevant warning signs should be installed at the entrance gate	Contractor
Kutaisi: Kldiashvili Reservoir	
All trees located at the construction site should be fenced and protected	Contractor
Site internally should be arranged properly and cleaned regularly. All construction materials should be properly segregated and stored adequately;	Contractor
Accumulated waste soil and construction waste should be taken out of the site immediately	Contractor
Proper site fencing needs to be arranged	Contractor
Kutaisi: TV Tower Reservoir	
Construction area should be fenced properly Relevant warning signs should be installed	Contractor
Site area should be arranged properly and organized in accordance with given instructions, including internal access roads (at least graveled to avoid mud roads)	Contractor
Household and Hazardous Waste containers should be installed in proper place with relevant signs	Contractor
Poti: Nabada Site	
Household Waste container should have clear sticker mentioned “HouseholdWaste” and regularly collected by the waste collection service	Contractor
Proper fencing of left site (additional part) with relevant material (several times instructed by ADB, Eptisa, UWSCG) site not to be visible	Contractor
The chlorine container, which belong to UWSCG/Poti Service Center should be disposed in safe place urgently	UWSCG under the observation of contractor
Cover trucks with tarpaulins and spraying water on the road to avoid dust generation	Contractor
Anaklia: Networks	
The adequate lightening of tranches should be provided with relevant signal lights. At the roads blinking signs should be installed;	Contractor
The surplus/waste soil along to tranches should be stored at specially allocated place for further use;	Contractor
Materials for refilling of tranches should be brought to the site when refilling is to start.	Contractor
Anaklia: Darcheli	
Site internally should be arranged properly and cleaned regularly.	Contractor

All construction materials should be properly segregated and stored adequately	Contractor
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V. ACTION PLAN FOR THE NEXT PERIOD

86. Finalize SEMP under REG-01 project, as per following schedule:

Grueli WTP	Feb. 2015
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87. Conduct monitoring of environmental quality under REG-01 project at each construction site in Kutaisi, Poti and Anaklia with particular reference to dust and noise. The specific plan for measurement is as follows:

Parameters	Quarterly measurement
Dust	June 2015
Vibration	June 2015
carbon monoxide	June 2015
nitrogen dioxide	June 2015
sulfur dioxide	June 2015
gamma radiation	June 2015
el-magnetic field radiation	June 2015
Noise	June 2015

88. Finalize Compensation action plan for removed Red books trees in Kutaisi Tetramitsa reservoir (Reg-01) and submit to the MoENRP for approval.

89. Carry out and implement actions identified in above action plan;


90. UWSCG and Eptisa to be carry out environmental audit of the territory adjacent to the new reservoir within Mes-01 sub-project in order to determine effectiveness of conducted restoration works. The audit will be conducted in late Spring, 2015, before defect liability period (July 2015).

91. Finalize fencing of Poti reservoir sites along the residential houses per standards recommended by Eptisa and UWSCG.

ANNEXES

ANNEX A: MONITORING MEASUREMENTS DATA

საქართველოს გარემოსა და ბუნებრივი რესურსების დაცვის სამინისტრო
MINISTRY OF ENVIRONMENTAL AND NATURAL RESOURCES PROTECTION OF GEORGIA

 **გარემოს ეროვნული სააგენტო**
NATIONAL ENVIRONMENTAL AGENCY

№ 12/1-42 30 01 2015


შპს "კობრა ჯორჯია"-ს უფლებამოსილ
წარმომადგენელს **ბ-ნ ხესუს სანჩეს როდრიგესს**

ბატონო ხესუს,

საქართველოს გარემოსა და ბუნებრივი რესურსების დაცვის სამინისტროს სსიპ "გარემოს
ეროვნულ სააგენტო"-სა და შპს "კობრა ჯორჯია"-ს შორის 2015 წლის 12 იანვარს გაფორმებული
ფმ 3/16 ხელშეკრულების თანახმად, გაწვდით ქუთაისში, ფოთსა და ანაკლიაში აღებული
ატმოსფერული ჰაერის სინჯების ქიმიური ანალიზისა და ხმაურის დონის გაზომვის შედეგებს.

დანართი: 2 გვ

პატივისცემით,

სააგენტოს უფროსი  **გივი ჩოჩია**

გაზომვის შედეგები

შპს “კობრა ჯორჯია“-სთან 12.01.2015. №3/16 გაფორმებული ხელშეკრულების თანახმად

22.01.2015წ

№	გაზომვის ადგილი	კოორდინატები	გაზომვის შედეგები				
			მტვერი მგ/მ³	ნახშირბადის მოწოქსიდი მგ/მ³	აზოტის დიოქსიდი მგ/მ³	გოგირდის დიოქსიდი მგ/მ³	სმაური დბ
1	2	3	4	5	6	7	8
1	ქ. ქუთაისი, ვაჟა ფშაველას ქ. 52	N 42°16'18,7" EO42°41'33,1"	0,005	0,24	0,001	< 0,1	43.1
2	ქ. ქუთაისი, ცაცხეშვილის ქ. 6	N 42°16'05,0" EO42°41'43,1"	0,191	0,85	0,001	< 0,1	41.2
3	ქ. ქუთაისი, ჩანჩაბაძის ქ. 93, აუზთან (მუშაობდა მქსკაგატორი)	N 42°16'51,0" EO42°41'33,1"	0,141	0,44	0,001	< 0,1	69.4
4	ქ. ქუთაისი, რუას ქ. 1	N 42°16'53,7" EO42°42'28,2"	0,003	0,18	0,001	< 0,1	45.8
5	ქ. ქუთაისი, ტყეშელის მკ-4 შესახვ.	N 42°16'30,7" EO42°43'17,5"	0,003	0,05	0,001	< 0,1	43.1
6	ქ. ქუთაისი, კლდიაშვილის ქ. 73	N 42°16'20,7" EO42°43'22,8"	0,008	0,71	0,002	< 0,1	53.0
7	ქ. ქუთაისი, სოლომონ მკ-2ს ქ. 8	N 42°15'52,6" EO42°43'13,7"	0,007	2,09	0,009	< 0,1	59.2
8	ქ. ქუთაისი, წყაროს ქ.13	N 42°16'49,1" EO42°41'24,9"	0,011	0,13	0,001	< 0,1	58.6
9	ქ. ქუთაისი, ტელეკანძის რეზერვუარი (მუშაობდა აშწე)	N 42°16'48,8" EO42°44'05,0"	0,022	0,41	0,004	< 0,1	64.3

10	ქ. ქუთაისი, ლესელიძის ქ. მე-2 შესახვ. 2	N 42°16'54,2" EO42°43'02,1"	0,177	0,45	0,013	< 0,1	53,7
11	ანაკლია, რეზერვუართან	N 42°25'59,1" EO42°40'49,8"	0,001	0,01	0,001	< 0,1	38,3
12	ანაკლია, ტრასა, სოფელი დარჩელი	N 42°26'18,3" EO42°41'22,7"	0,011	1,02	0,008	< 0,1	46,5
13	ფოთი, წყალსადენის მიმდებარე ტერიტორია, უახლოეს საცხოვრებელ სახლთან	N 42°10'06,8" EO42°40'19,8"	0,003	2,01	0,032	< 0,1	49,8
14	ფოთი, სოფელი ხორვა	N 42°13'54,6" EO42°47'50,0"	0,004	1,21	0,006	< 0,1	57,6
15	ფოთი, სოფელი ნოსიო, წყალსადენთან	N 42°16'14,6" EO42°07'26,3"	0,001	0,04	0,001	< 0,1	42,5

გარემოს ეროვნული სააგენტოს

გარემოს დაბინძურების მონიტორინგის დეპარტამენტის

მთ. სპეციალისტი:

უფ. სპეციალისტი:

შეთანხმებულია:

დეპარტამენტის უფროსი:

ომარ ყენია

გიგლა მორგოშია

მ. არაბიძე



ANNEX B: PROJECT PHOTOS



Kutaisi network after reinstatement



Kutaisi Vaja-Pshavela



Anaklia (Darcheli)



Anaklia (Darcheli)



Anaklia (Darcheli)



Anaklia Darcheli



Anaklia Transmission



Kutaisi Network



Kutaisi TV Tower



Kutaisi Network



Poti (Nabada)



Poti (Nabada)



MES-01 Headworks



MES-01 Reservoir

ANNEX C: NON-COMPLIANCE NOTICES


Project: USIIP	Non-compliance Notice KUT AISI
Contract No: REG-01	
Contractor: COBRA	
Supervision: Eptisa	
Reference: Kutaisi – Network, Kldiashvili, TV Tower and VajaPshavela sites.	

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


Kldiashvili site

- Accumulated waste soil and construction waste should be taken out of the site immediately!
- All trees located at the construction site should be fenced properly!
- Household and Hazardous Waste containers should be installed in proper place with relevant signs!
- Site internally should be arranged properly and cleaned regularly. All construction materials should be properly segregated and stored adequately!
- Proper site fencing needs to be arranged



Vaja Pshavela site

- Proper fuel/oil spill response items should be available at the site as per SEMP, however it was noted that oil spill absorbent was available at the site
- Trees located at the construction site should be fenced and preserved properly!



TV Tower site

- Construction site should be defined and fenced properly with relevant material (avoid fencing with safety tapes)!

- Relevant warning signs should be installed
- Site area should be arranged properly and organized in accordance with given instructions, including internal access roads (at least graveled to avoid mud roads)!
- Household and Hazardous Waste containers should be installed in proper place with relevant signs!
- **Bio Toilet should be installed**



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!
- Refilling/compaction and reinstatement process should bring site at the same condition as it was before construction (there are some sites observed with no final reinstatement, like, Gelati, Solomon and Kldiashvili streets)



All these conditions have to be remedied within Seven (7) days by the prime Contractor (Cobra).

Site visit date: 14-15.11.14

Site visit and monitoring was conducted by:
Irakli Legashvili – Eptisa
Ketevan Chomakhidze - UWSCG-USIIP

Project: USIIP

Contract No : REG-01

Contractor : COBRA

**Reference : Kutaisi : network – Kldiashvili, Gelati,
Kupradze, Erevani streets and Vazha Pshavela site**

**Non-compliance Notice
REG-01
Kutaisi, Poti, Anaklia**

Monitoring of REG -01 project was conducted by Irakli Legashvili (Eptisa), Badri Tsatava (UWSCG/DREP), Ketevan Chomakhidze Environmental Specialist of USIIP (UWSCG)	
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	
<p>Non-Compliance at Vaja Pshavela Street To be improved immediately</p> <ul style="list-style-type: none"> – The surplus/waste soil should be stored separately for further use at the dedicated place to avoid disturbance of the population, if trenches are left open more than 24 hours – Installed walkways by Cobra not corresponding the standards and instructions given to Cobra by Environmental Specialists of Eptisa and UWSCG, therefore relevant wooden/metal walkways/planks should be installed across open tranches when passing settlement area – Cover trucks with tarpaulins and spraying water on the road to avoid dust generation <p>Non-Compliance at Vaja Pshavela reservoir site To be improved in 3-5 days</p> <ul style="list-style-type: none"> – Household Waste container should have clear sticker mentioned “Household Waste” and regularly collected by the waste collection service – Hazardous Waste container should be installed in proper place – The standard and relevant warning signs should be installed on the entrance gate <p>Non-Compliance at Poti – Nabada site To be improved in 3-5 days</p> <ul style="list-style-type: none"> – Household Waste container should have clear sticker mentioned “Household Waste” and regularly collected by the waste collection service – Hazardous Waste container should be installed in proper place – Proper fencing of left site with relevant material (several times instructed by ADB, Eptisa, UWSCG) site not to be visible <p>Non-Compliance at Anaklia networks To be improved immediately</p> <ul style="list-style-type: none"> – The surplus/waste soil pile should be stored separately for further use at the dedicated place (at some places left more than week) – The standard fixing should be used for warning signs or safety tapes. At the roads blinking signs should be installed if street central lightening is not operating – The relevant wooden/metal walkways/planks should be installed across open tranches when passing settlement area – Refilling/compaction and reinstatement process should bring site at the same condition as it was before construction – All openly left tranches should be fenced properly with standard warning signs and safety tapes – Ensure that all workers are provided with and use safety - helmets, hand gloves, boots, masks, safety belts (while working at heights etc); <p>Site visit date: 14-15.11.14 Site visit and monitoring was conducted by: Irakli Legashvili – Eptisa Ketevan Chomakhidze - UWSCG-USIIP</p>	

Project: USIIP	Non-compliance Notice KUT AISI
Contract No: REG-01	

Contractor: COBRA Reference: Kutaisi – Network, Kldiashvili and Vaja Pshavela sites; Anaklia - Network & Darcheli site; Poti – Nabada site	ANAKLIA POTI
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	
<p><u>Non-Compliance in Kutaisi</u></p> <p><u>Kldiashvili site</u></p> <ul style="list-style-type: none"> - All trees located at the construction site should be fenced; - Household and Hazardous Waste containers should be installed in proper place with relevant signs; - Site internally should be arranged properly and cleaned regularly. All construction materials should be properly segregated and stored adequately; - Accumulated waste soil and construction waste should be taken out of the site immediately <div data-bbox="207 688 537 898" data-label="Image"> </div> <div data-bbox="558 688 932 898" data-label="Image"> </div> <div data-bbox="953 688 1320 898" data-label="Image"> </div> <p><u>Vaja Pshavela site</u></p> <ul style="list-style-type: none"> - Truck wheels cleaning drainage system should be cleaned regularly to avoid its blockage; - 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; - Construction area should be cleaned and organized regularly. <div data-bbox="253 1188 599 1383" data-label="Image"> </div> <div data-bbox="621 1188 967 1383" data-label="Image"> </div> <div data-bbox="989 1188 1330 1383" data-label="Image"> </div> <p><u>TV Tower site</u></p> <ul style="list-style-type: none"> - Construction area should be fenced properly - Enough and relevant warning signs should be installed - Site area should be arranged properly and organized in accordance with given instructions, including internal access roads (at least graveled to avoid mud roads) - Household and hazardous Waste containers should be installed in proper place with relevant signs - Site internally should be arranged properly and cleaned regularly. All construction materials should be properly stored - Accumulated waste soil and construction waste should be taken out of the site immediately - Trucks wheel washing system should apply and relevant platform should be arranged - On site, proper storage and parking area should be arranged 	

- Workers should be equipped with complete PPE



Network

- The adequate lightening of tranches should be provided with relevant signal lights;
- 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 tranches when passing settlement area;
- Refilling/compaction and reinstatement process should bring site at the same condition as it was before construction



Non-Compliance in Poti Nabada site

- All trees located at the construction site should be fenced with proper fencing material. The construction waste should be removed from fenced trees urgently;
- Provide adequate fencing of construction area from all side. Front part of site is done but behind of site some parts still needs urgent fencing;
- The chlorine container should be disposed in safe place urgently;
- Fuel and lubricants spill elimination items have no special indication sign and sawdust container is empty;
- All workers (even personnel of subcontractor) should be equipped with complete PPE;
- Overall site should be clean and organized properly



Non-Compliance in Anaklia Darcheli site

- Parking area is arranged but there is NO parking special sign "Parking Area" that was available before;
- On site, construction equipment and vehicles should be kept in safe environment and in proper place;
- All construction materials should be stored properly within site facilities.



Network

- The adequate lightening of tranches should be provided with relevant signal lights. At the roads blinking signs should be installed;
- The surplus/waste soil along to tranches should be stored at specially allocated place for further use;
- Workers should wear complete PPE;
- Materials for refilling of tranches should be brought to the site when refilling is to start. To leave refilling materials nearby to tranches is NOT acceptable;



All these conditions have to be remedied within Seven (7) days by the prime Contractor (Cobra).

Date of site visits: 25-26.09.14

**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			
	Household and hazardous Waste containers should have clear sticker mentioned “Household Waste” and regularly collected by the waste collection service	Improved partially	To improve removal of waste from project site on timely manner
	The standard and relevant warning signs should be installed on the entrance gate	Partially Completed	Contractor's environmental Specialist instructed several times to install proper warning signs
	Fuel/oil spill response items should be available at the site even if there is no high risk of fuel/oil spill;	Partially Completed	Contractor's environmental Specialist instructed to make arrangements asap
	All accumulated surplus soil should be taken away from site for its final disposal;	Completed	No further actions required
	Construction area should be cleaned and organized regularly.	Partially Completed	Sights should be organized properly and construction site kept clean
	Trees located at the construction site should be fenced and preserved properly	Completed	No further actions required
Reg-01 Kutaisi Kldiashvili reservoir site			
	All trees located at the construction site should be fenced;	Partially Completed	Contractor's environment specialist got clear instruction to act timely
	Household and Hazardous Waste containers should be installed in proper place with relevant signs;	Completed	
	Site internally should be arranged properly and cleaned regularly. All construction materials should be properly segregated and	Partially Completed	Inspite the fact that site internal arrangement is improved, still there is need of better

	stored adequately;		management
	Accumulated waste soil and construction waste should be taken out of the site immediately	Completed	
	Proper site fencing needs to be arranged	Partially Completed	Fencing issue is improved but there are some gaps to be completed
Reg-01 Kutaisi TV Tower reservoir site			
	Construction area should be fenced properly Relevant warning signs should be installed	Partially completed	The situation was partly improved by Contractor's ES after issuance of non-compliance
	Household and hazardous Waste containers should be installed in proper place with relevant signs	Completed	No further actions are required
	Accumulated waste soil and construction waste should be taken out of the site immediately	Completed	No further actions are required
	On site, proper storage and parking area should be arranged	Completed	No further actions are required
	Site area should be arranged properly and organized in accordance with given instructions, including internal access roads (at least graveled to avoid mud roads)	Not completed	Clear warning was given to contractor for immediate improvement of site internally
Reg-01 Reg-01 project Kutaisi network			
	The surplus/waste soil should be stored separately for further use at the dedicated place to avoid disturbance of the population, if trenches are left open more than 24 hours	Partially Completed	For several times surplus soil improper disposal was observed and clear message was delivered for improvement
	Standard and safe walkways should be installed for pedestrians passing roads	Partially completed	Installed walkways by Cobra not corresponding the standards and instructions given to Cobra by Environmental Specialists
	Cover trucks with tarpaulins and spraying water on the road to avoid dust generation	Completed	The situation was improved by Contractor's ES after

			the instructions given to Contractor
	The adequate lightening of tranches should be provided with relevant signal lights;	Partially completed	Partially completed not following the standards
	Refilling/compaction and reinstatement process should bring site at the same condition as it was before construction	Completed partially	At some segments of network construction there is observed non-complete reinstatement
Reg-01 Poti Nabada			
	Household Waste container should have clear sticker mentioned "Household Waste" and regularly collected by the waste collection service	Completed	
	Cover trucks with tarpaulins and spraying water on the road to avoid dust generation	Partially completed	The situation was only partially improved, despite of issuing of non-compliance notes and numerous instruction given to Contractor's ES
	Proper fencing of left site with relevant material (several times instructed by ADB, Eptisa, UWSCG) site not to be visible	Partially completed	The relevant materials have been used by contractor to fence the additional part of Poti site, however, length of fencing is not corresponding for complete fencing as per instructions given by Eptisa and UWSCG
	The chlorine container should be disposed in safe place urgently;	Completed	
	Fuel and lubricants spill elimination items have no special indication sign and sawdust container is empty;	Partially completed	Contractor's environmental Specialist instructed to make arrangements
	All workers (even personnel of subcontractor) should be equipped with complete PPE;	Completed	
Reg-01 Anaklia Darcheli			
	Parking area is arranged but there is NO parking special sign "Parking Area" that was available before;	Completed	No further actions are required
	On site, construction	Completed	No further actions are

	equipment and vehicles should be kept in safe environment and in proper place;		required
	Site internally should be arranged properly and cleaned regularly. All construction materials should be properly segregated and stored adequately	Partially completed	Site should be organized properly and construction site kept clean
Reg-01 Anaklia Transmission main			
	The adequate lightening of tranches should be provided with relevant signal lights. At the roads blinking signs should be installed;	Not completed	Partially completed not following the standards
	The surplus/waste soil along to tranches should be stored at specially allocated place for further use;	Completed	
	Workers should wear complete PPE;	Partially completed	Clear instruction was delivered with regard to PPE
	Materials for refilling of tranches should be brought to the site when refilling is to start. To leave refilling materials nearby to tranches is NOT acceptable	Not completed	During monitoring there were observed number of construction segments where construction materials were left for longer then allowed