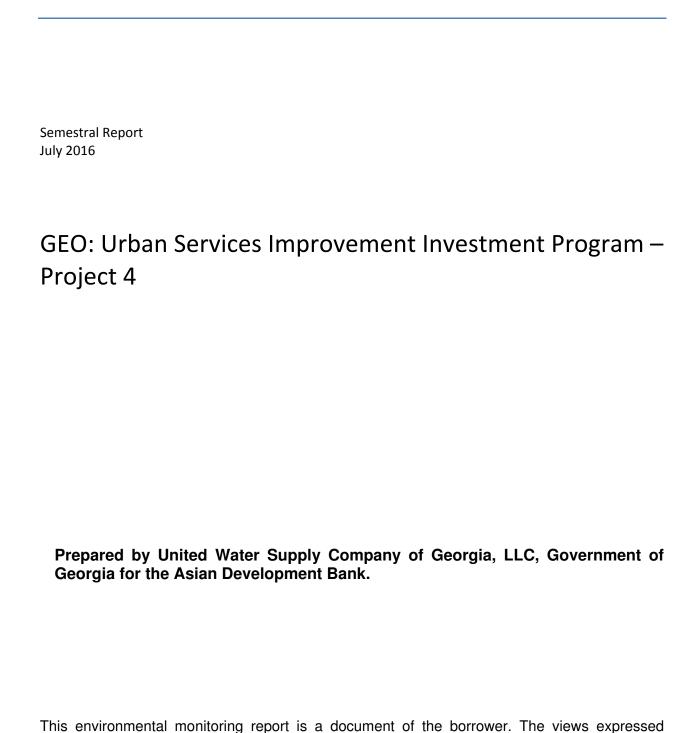
### **Environmental Monitoring Report**



herein do not necessarily represent those of ADB's Board of Directors, Management, or staff,

and may be preliminary in nature.

### Bi-annual Environmental Monitoring Report

Project Number: 43405-026

January-June 2016 Loan Number 3238-GEO

GEORGIA: URBAN SERVICES IMPROVEMENT INVESTMENT PROGRAM (TRANCHE 4) (FINANCED BY THE ASIAN DEVELOPMENT BANK)

Prepared by: Ketevan Chomakhidze, Environmental Safeguards Specialist

"United Water Supply Company of Georgia", LLC Tbilisi, Georgia

For: The Ministry of Regional Development and Infrastructure of Georgia and the

Asian Development Bank

Endorsed by: Maka Goderdzishvili, Head of Division of Resettlement and

**Environment Protection** 

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### **ABBREVIATIONS**

ADB Asian Development Bank

DC Design Consultant

**DREP** Division of Resettlement and Environmental Protection

**EA** Executing Agency

**EARF** Environmental Assessment and Review Framework

**EHS** Environmental Health & Safety

**EIA** Environmental Impact Assessment

**EIP** Environmental Impact Permit

**EMP/ SSEMP** Environnemental Management Plan/ Site-Specific 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 January-June 2016 time period.
- 1. 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.
- 2. 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.
- 3. 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.
- 4. Tranche 4 of the Investment Program includes: 1. Construction of Water Supply System in Zugdidi (Zug 01); 2. Rehabilitation of Wastewater System in Poti (Pot-01) and 3. Construction of Wastewater Treatment Plant in Poti (Pot-02).
- **5.** The following projects are financed under **Tranche 4**:

### Construction of Water Supply System in Zugdidi (Zug 01)

**6.** The project comprises of the construction of 1 water supply pumping station — 1,170 m³, construction of new reservoirs (3,300 m³x3); distribution network - laying of approximately 220 km water supply pipelines; approximately 15 km transmission main; wells - drilling of 10 drinking water wells.

### Rehabilitation of Wastewater System in Poti (Pot-01)

7. Pot-01 project includes the construction of 112.4 km of new sewerage pipes, and construction of 28 sewage pumping stations.

### Construction of Wastewater Treatment Plant in Poti (Pot-02).

- 8. The project comprises of the construction of new Wastewater Treatment Plant with the capacity of 11,663 m³/day for Poti.
- **9.** A new Supervision Consultant (SAFEGE France with Engineering Solution LLC Georgia) is selected for implementation of Tranche 4 of the USIIP.

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

- **10.** During the reporting period, in both projects (Zugdidi, Poti) scheduled construction activities were carried out. Zug-01 project construction of Worker Camp in Rukhi completed, all facilities of the camp office, accommodation, catering are operational; Bashi existing reservoir demolished; basement of new reservoir excavated; water pipeline network construction is ongoing.
- 11. Poti-01 Project construction of Worker Camp in Poti completed, all facilities of the camp office, accommodation, catering are operational. Poti sewage system pipeline network construction is ongoing, 400 House connections have been installed and preparation for pump stations construction has been started.

### Construction progress during the previous 6 months under Zug-01 and Poti-01 projects (January-June 2016)

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

### Zug-01

Zug-01	Zugdidi Water Supply System Construction
Sites	Zugdidi Water Pipeline Network; Bashi Reservoir, Ingiri Pump Station & Water well Field
Works undertaken during January-	Bashi existing reservoir demolished, basement of new reservoir excavated.
June 2016	Mobilization for Ingiri site competed.
	Pump station construction site preparation is ongoing (Fencing, signage etc.)

Zug-01	Zugdidi Transmission Pipelines
Works undertaken	OD 63 PE – 809.05m 10.58%
during January-June	OD 75 PE – 2742.19m 9.89%
2016	OD 90 PE – 2222.97m 14.01%
	OD 110 PE – 17304.38m 12.79%
	OD 125 PE – 630.09m 8.02%
	OD 140 PE – 487.35m 10.41%
	OD 180 PE - 1341.06m 12.08%
	OD 200 PE – 882.28m 55.14%
	OD 225 PE – 609.52m 12.09%

OD 280 PE – 287.01m	30.21%
OD 315 PE – 501.65m	20.56%
Total: 27818m	

Zug-01	Zugdidi Reservoirs & Pump Stations
Site	Bash Reservoir
Works undertaken	Demolition of existing reservoir 98%
during January-June 2016	Excavation of foundation for new reservoir (for 1 reservoir) – 100%
Site	Ingiri Pumping Station
Works undertaken	Mobilization - 100%
during January-June	Ingiri Well Field:
2016	Mobilization – 100%
	Drilling Well N4 – 25m

### Pot-01

Pot-01	Poti Gravity Pipes:
Sites	Sewage network construction.
Works undertaken	D 200 – 5010m 8.79%
during January-June	D 300 – 2990m 7.87%
2016	Total: 8000m

Pot-01	Poti Sewage Pressure&Gravity Pipelines
Works undertaken	OD 110 PE – 1800m 31.03%
, ,	OD 140 PE – 840m 36.52%
2016	OD 315 PE – 95m 9.5%
	OD 355 PE – 2780m 60.43%
	OD 400 PE – 2900m 41.43%
	Total: 8415m

### 1.2 Changes in Project Organization and Environmental Management Team

### **Agencies Involved in Investment Program Implementation**

12. 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.
- 13. 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 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 2016 a new director Mr.Giorgi Koberidze was appointed in UWSCG.
- 14. 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.
- 15. All mitigation measures during construction have to be implemented by the contractor and these are monitored by the supervision consultant (SC). To ensure the smooth implementation of EMPs and SEMPs of subprojects, an Environmental Management Specialist (EMS) is employed by the SC/EPTISA. SC/EMS conducts routine observations and surveys, prepares quarterly environmental reports and submits these to UWSCG.
- **16.** 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 Solid Waste Disposal Plan and agreed the MoENRP and Local Government
- 17. DC is responsible for developing and incorporation of mitigation measures in design and construction.
- 18. The environmental specialist (ES) is hired by UWSCG under the USIIP to assist and advise the Resettlement and Environmental Protection Unit (UREP) 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.
- **19.** 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 and one specialists, who is responsible for both resettlement and environmental issues.
- **20.** 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

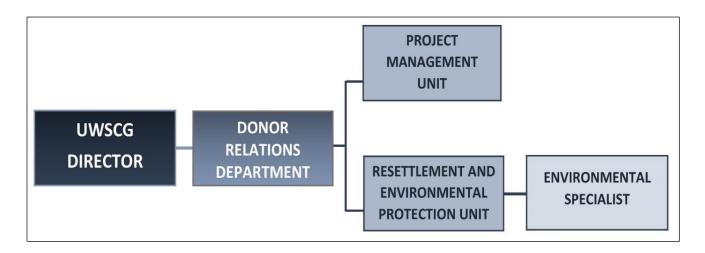
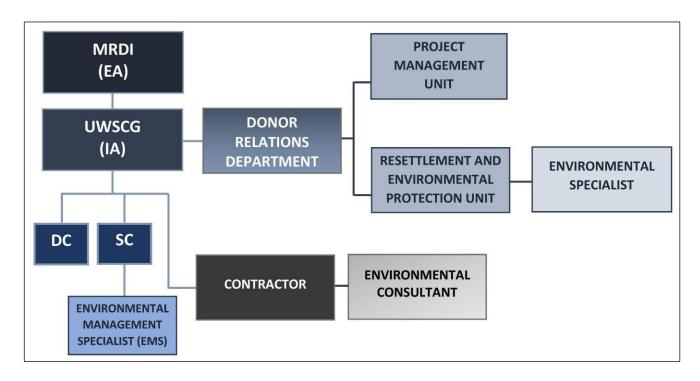


Figure 2: Structure Diagram of the Agencies Involved in Investment Program Implementation



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

- **21.** 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.
- 22. Ministry of Regional Development and Infrastructure (MoRDI) is the Executing Agency (EA) responsible for oversee progress and provide guidance on the Investment Program implementation; convene regular meetings in consultation with the SC and UWSCG; ensure compliance with Investment Program covenants.

- 23. Oversight of the USIIP with regards to environmental management is the responsibility of the environmental safeguards team, in particular UWSCG/UREP and the Environmental Specialist of USIIP.
- **24.** The team has constant communication with the Supervision Consultant, Contractor, reviews/comments all environmental reports submitted by DC, SC and contractors.
- 25. SSEMPs were prepared by contractor, endorsed by SC/Eptisa and approved by UWSCG/UREP.
- **26.** SC is responsible for environmental capacity building, monitoring of implementation of SSEMPs and for developing quarterly reports. The Contractor has a full time Environmental Specialist who carries out day to day monitoring and submits monthly progress reports.
- **27.** ADB oversees project sites regularly and gives clear instructions for the project sites improvements with regard to environmental safeguards.
- 28. To resolve the observed environmental safeguard issues, the regular Environmental Meetings are organized with participation of UWSCG/IPMO/UREP, Safege/ESL and Contractors. During the meetings environmental issues and implementation of the mitigation measures are discussed.
- 29. A Grievance Redress Committee, which was established under the REG-01 project in Zugdidi, for Anaklia water supple component, will consider complaints within the framework of Zug-01 project as well. GRC for Poti-01 project has also been established during the reporting period.
- **30.** Contractor of Zug-01 project during the reporting period signed agreements with the following subcontractor:
  - Agreement between Az Inshaat-N LTD and Laboratory Research Center LTD on drinking water and sewage full bacteriological and chemical analyze.
  - Agreement between Az Inshaat-N LTD and Zugdidi Municipal Service on domestic waste removal and disposal.
  - Agreement between Az Inshaat-N LTD and Zugdidi Municipality on territory allocation for construction material (gravel and sand) temporary stockpiling.
  - Az Inshaat-N LTD Borrow pit License for 184 500 m3 gravel extraction from Enguri riverbed.
  - **31.** Contractor of Pot-01 project during the reporting period operated with the following subcontractor:
    - Agreement between the "Azeragrartikinti" JSC and the Municipality of the Poti City Hall for Disposal of the Inert Waste
    - Agreement between the "Azeragrartikinti" JSC and Municipality of the Poti City Hall for Disposal of the Municipal Waste
  - **32.** 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.
  - **33.** Under the Zug-01 and Pot-01 projects contractors signed agreements with the Ltd "Eco-Spectri" for the monitoring measurements (dust, CO, NO2, SO2, noise) of all construction sites.

**34.** Project organization for the awarded contracts listed above is given in the table 2 below.

Table 2: List of contracts under T4

Contract #	Employer	Contractor	Contract Signature date	Contract Final Date		
Contract No: P43405-ICB-Zug-01	UWSCG	AS Inshaat-N LLC	26-Oct-15 25-Oct-17			
Contract No: P43405-ICB-Pot-01	UWSCG	"Azeragrartikinti" JSC	25-Dec-15	25-Jan-18		
Contract #	Employer	Contractor	Contract Signature date	Contract Final Date		
Contract No: UWSCG/USIIP/QCBS/02- 2014	UWSCG	SAFEGE (France) with Engineering Solution LLC (Georgia)	2-Jul-15	8-Jun-18		

### **PART II - ENVIRONMENTAL MONITORING**

- 35. 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 January-June, 2016. Also unscheduled monitoring visits were carried out and on-site verbal instructions have been given to the contractor and its environmental team 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.
- **36.** The monitoring activities included:
  - The monitoring of compliance of construction activities under Zug-01 project sites to the EMP/SSEMP requirements;
  - The monitoring of compliance of construction activities under Pot-01 project sites to the overall project EMP/SSEMP requirements.
- **37.** Environmental Monitoring Specialist hired under the ZUG-01 subproject conducted the day-to-day monitoring of the construction sites, developed the monthly monitoring reports and submitted to SC/Safege.
- **38.** Environmental Monitoring Specialist hired under the POT-01 subproject conducted the day-to-day monitoring of the construction sites, developed the monthly monitoring reports and submitted to SC/Safege.

- **39.** Environmental Monitoring Specialist of SC/Safege developed quarterly monitoring reports for UWSCG/USIIP based on the monthly reports submitted by Contractor, and based on environmental site inspection.
- **40.** ES of USIIP performed monitoring of contractor's performance with the approved EMPs and SSEMPs, 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.
- **41.** The construction activities affecting the environment during the reporting period are as follows:
  - Excavation works
  - Removal of soil
  - Removal of vegetation
  - Backfilling of trenches
  - **42.** The following items are monitored during the implementation of the project for Reg-01, Ure-01 and Tbilisi Head Office:
    - Air Quality
    - Noise
    - Vibration
    - Top soil stripping
    - Removal of vegetation/trees for construction
  - **43.** 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

### **Zugdidi Water Supply Infrastructures (Contract ZUG-01):**

- **44.** Environmental monitoring of dust, air condition, noise and vibration is performed as indicated in the relevant EMPs/SSEMPs (on the bi-annual basis).
- **45.** The Environmental Measurements were carried out by the contractor at various locations of construction sites. The National Environmental Standard (Maximum Permissible Level) for Dust is 0,5 Mg/m3, for CO is 5,0 Mg/m3, for S02 0,5 Mg/m3., Noise level 55dB (day time), 45dB (night time) is regulated by the Decree No. 297/N "On Approval of Environmental Quality Norms" (August 16, 2001 of the Ministry of Labor, Health and Social Affairs).
- **46.** Noise impacts should not exceed the levels presented in Table 3, in accordance with Decree No. 297/N "On Approval of Environmental Quality Norms" (August 16, 2001 of the Ministry of Labor, Health and Social Affairs), or result in a maximum increase in background levels of 3 dB at the nearest receptor location off-site.

Table 3: Noise Level Guidelines

Noise	d	В
Receptor	Daytime 07:00 - 22:00	Nighttime 22:00 - 07:00

Residential; institutional; educational	55	45
Industrial; commercial	70	70

47. The monitoring measurements were carried out by contractors within the framework of the Zug-01 and Pot-01 projects in various construction sites on June 2016 (See Annex 1). Location and data are included in the table below. The next monitoring measurements will be conducted in September 2016 and results will be reflected in the next July-December 2016 EMRs. According to data received in June 2016 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. All measurement were carried out at day tile (15:00 – 17:00pm).

Table 4: Monitoring measurements under ZUG-01, POT-01 projects

### **ZUG-01**

Place of Measurement		Coordinates	Dust Mg/m³		CO Mg/m³		NO <sub>2</sub> Mg/m <sup>3</sup>						SO <sub>2</sub> Mg/m <sup>3</sup>		Noise db		Radiation Mr/h		Vibro accelo m/sec	eration
		Standard	Result	Standard	Result	Standard	Result	Standard	Result	Standard	Result	Standard	Result	Standard	Result					
Bashi Reservoir	42º32'31.53°N 41º53'37.83°E	0.5	≥ 0.1	5.0	1,1	0.2	0.02	0.5	0.4	72	69	30	14	4.0	3.24					
Ingiri Pumping Station	41°32'32.99"N 41°52'51.51"E		≥ 0.1		1.6		0.03		0.2		68		14		1.37					
Ingiri Water Intake	41°29°12.90°N 41°53°26.55°°E		≥ 0.1		1.9		≥ 0.01		0.3		62		13		1.45					

### **POT-01**

Place of Measurement		Coordinates	Dust Mg/r		CO Mg/r	m <sup>3</sup>	NO <sub>2</sub> Mg/s		SO <sub>2</sub> Mg/n	n <sup>3</sup>	Noise db		Radiat Mr/h	ion	Vibro accelo m/sec	eration.
		Standard	Result	Standard	Result	Standard	Result	Standard	Result	Standard	Result	Standard	Result	Standard	Result	
Chavchavadze street	42°10′50.28°N 41°39′44.76°E	0.5	> 0.1	5.0	1,1	0.2	0.02	0.5	0.4	72	69	30	14	4.0	3.34	
Barnovi street	42°09'58.99°N 41°39'51.51"E		≥ 0.1		0.6		0.03		0.3		68		14		2.24	
Mzarcluas street	42°10°26.39°N 41°39°47.09°E		≥ 0.1		0.9		≥ 0.01		0.3		62		13-		1.44	
Guria street	42°07′54.46°N 41°41′28.26°E		≥ 0,1		0.5		0.02		0.2		67		14		3.37	

15

### **PART III - ENVIRONMENTAL MANAGEMENT**

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

### SSEMPs prepared under Zug-01 and Pot-01 projects (January-June 2016)

- **48.** SSEMPs for Bashi Reservoir, Ingiri Water Well Field and Pumping Station under Zug-01 project have been prepared by Contractor, endorsed by SC/Safege and approved by UWSCG.
- **49.** SSEMP for Poti Construction Camp have been prepared by Contractor, endorsed by SC/Safege and approved by UWSCG. Preparation of the SSEMP for Poti sewage system pumping stations construction is ongoing.

**Table 5:** Status of Environmental Management Plans

Management Plan	Status	Date of Submission
Environmental Management Plan/Site- Specific EMP (SSEMP) under Zug-01 project, in particular:		
Bashi Reservoir	Approved by UWSCG	March 2016
Ingiri well fields and pumping station	Approved By UWSCG	May 2016
Poti Construction Camp		April 2016
Company Waste Management Plan (according to Geo legislation) to be agreed	Not submitted	Will be submitted by the end of
with MoENRP		December 2016
SSEMP for Poti Sewerage System and Pumping Stations	Not submitted	September 2016

### 3.2 Site HSE Inspections and Audit

- **50.** Zugdidi and Poti construction sites Inspection and Audit was carried out by the UWSCG/UREP, ES of UWSCG/USIIP and environmental Specialist of SC/Safege on the regular basis. The following non-compliances have been observed during the site visits and verbal instructions have been given to contractor's relevant staff and official warning letters submitted from supervisor engineer:
  - Open trenches and vehicular and pedestrian access hamper. Unsatisfied housekeeping has been observed at the camp and construction sites, construction materials are not properly segregated and stored adequately to avoid disturbance of residents and businesses, Proper

walkways/planks should be installed across open tranches - *Pot-01 (16.05.2016), Zug-01-(15.06.2016)* 

Unsatisfied housekeeping has been observed at the camp and construction sites (remaining construction materials and waste). Fuel storage tanks should be surrounded with oil containment barrier 110% of the tank volume. Sufficient fire extinguisher and spill kit should be on place, all workers (even personnel of subcontractor) should be equipped with complete PPE - (*Pot-01 - 16.05.2016*)

### 3.3 Corrective Action Plans

51. 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, Safege, 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 6:** Actions taken for implementation of mitigation measures under ZUG-01, POT-01 projects June 2016

### Zug-01 and Pot-01

Construction Site	Environmental Issues	Action taken			
Zugdidi Network	All construction materials should be properly segregated and stored adequately to avoid disturbance of residents and businesses	Partially Completed			
	Around open tranches proper warning signs and safety types should be installed	Partially Completed			
	Proper walkways/planks should be installed across open tranches	Partially Completed			
	All construction materials should be properly segregated and stored adequately to avoid disturbance of residents and businesses!	Partially Completed			
Poti/Networ k	All construction materials should be properly segregated and stored adequately to avoid disturbance of residents and businesses!	Not Completed			
	Tarpaulins cover during materials transportation should be used				
	Install safety signs, tapes and trench side barriers around all open tranches	Completed			
Poti Camp Site	Topsoil should be stored and protected adequately and watering regularly	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

### 3.5 Actions taken to reflect the findings of ADB mission carried out on 20-22 April 2016:

Table 7: Status of findings of ADB mission carried out on 20-22 April 2016

Project	Specific Issues	Deadline for submission/Implementa tion	Implementation Status
	ndings of ADB mission carried out on 20		
	on of Water Supply System in Kutaisi, P	oti and Anaklia – USIIP, T	1
Zug-01			
	There is a process of dismantling of old facilities. Construction waste will be disposed at special designated area, which was agreed with local municipality on contractual bases.	May 2016	Completed
	All documents requested by the NES (IEE, EMP, SSEMP, monitoring reports, checklists, licenses, permits, complaints log book, as well as records of trainings) were kept on site.	January 2016	Completed
	Area of the camp is in a good condition, is fenced and kept clear.	May 2016	Completed
POT-01: Im	provement of Poti Wastewater Syste	m	
	There is a mobilization stage. Fencing of the construction territory will be installed in 3 weeks period	May 2016	Completed

(end of May 2016).	

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

- Contractor finalized, SC/Safege endorsed and UWSCG approved for SSEMP for Bashi Reservoir under Zug-01 project in March 2016.
- Contractor prepared, SC/Safege endorsed and UWSCG approved SSEMP for Ingiri Well Fields and Pumping Station under Zug-01 project in May 2016.
- UWSCG/UREP carried out capacity building activities for Contractors in Environmental Safeguards for implementation of Zug-01 and Pot-01 projects January- February 2016.
- UWSCG, SC carried out public awareness activities for Zugdidi and Poti population including information about the GRM and GRC in April-May 2016.
- Monitoring of environmental quality under Zug-01 project (Bashi Reservoir, Ingiri well fields and pumping stations and network) have been conducted in June 2016.
- Monitoring of environmental quality under Pot-01 project (network) was conducted in June 2016.

### 3.4 Consultations and Complaints

### **Public Awareness Activities:**

- **52.** Consultation meeting with affected people living in close proximity to the construction site in Zugdidi/Bashi reservoir (Zug-01) and Poti Pumping Stations (Pot-01) were undertaken during the reporting period. The meeting were attended by representatives of UREP/UWSCG, USIIP Environmental Specialist, representatives of SC/Safege, as well as representatives of the local Service Centers of Zugdidi and Poti.
- 53. The purpose of above mentioned consultation were: to ensure the local residents informed participation in project implementation and monitoring; to inform them of the possible impacts of the project on their health and the environment, and efforts to be undertaken by the contractor to minimize the impact and to mitigate impact when avoidance is not possible; to introduce the project benefits to them as a result of project implementation.
- **54.** During the meeting local population showed a support for the Zugdidi water supply subproject. They stressed the importance and the need to improve the water supply system in Zugdidi.

### **Trainings**

- **55.** On site environmental safeguard training were organized for environmental team of Pot-01 and Zug-01 projects on a regular bases during the site visits. Environmental specialists of the above mentioned contractors were introduced with all necessary safeguard requirements of ADB/SPS 2009.
- **56.** The main issues of discussion were the obligations of contractor in terms of environmental safeguards and issues that are to be managed during construction process.
- 57. The issues of discussion were as follows:
  - Site-specific Environmental Management Plans and their implementation
  - Site management

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

58. For the effective implementation of a GRM system under the USIIP, UWSCG issued special order (#122) on 30 April 2014. The "Establishment of GRM within the Framework of the Asian Development Bank Funded Projects" signed by the head of UWSCG gives clear instructions to every involved stakeholder how to act when affected people are impacted by the project. Detailed description of GRM procedures are provided in ANNEX A.

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

### 4.1 Conclusions and recommendations

**59.** Necessary instructions have been given to the Contractor by UWSCG and SC to follow the EMPs and SSEMPs for Zug-01 and Pot-01 projects.

### 4.2 Action Plan for the next period

- Contractor, SC, UWSCG/UREP, UWSCG/PR department to continue Public Awareness activities within the Zug-01 and Pot-01 projects (August 2016)
- Contractor to Prepare, SC/Safege to endorse and UWSCG to approve SSEMP for Poti Sewerage network and pumping stations
- Conduct monitoring of environmental quality under Zug-01 project (Bashi Reservoir, Ingiri well fields and pumping stations and network). The specific plan for measurement is as follows:

Parameters	Quarterly measurement
Dust	September 2016
Vibration	September 2016
Carbon monoxide	September 2016
Nitrogen dioxide	September 2016
Noise	September 2016

 Conduct monitoring of environmental quality under Pot-01 project (network, Pumping Stations). The specific plan for measurement is as follows:

Parameters	Quarterly measurement
Dust	September 2016
Vibration	September 2016
Carbon monoxide	September 2016
Nitrogen dioxide	September 2016
Noise	September 2016

### **ANNEX A: MONITORING MEASUREMENT DATA**

### **Zug-01 monitoring measurements**

### Water Sanitation Services in Zugdid

### Monitoring measurements

### 12.07.2016.

Place of Coordinates Measurement	Coordinates			CO Mg/n	CO NO <sub>2</sub> Mg/m <sup>3</sup>		SO <sub>2</sub> Mg/m <sup>3</sup>		Noise db		Radiation Mr/h		Vibro- acceleration m/sec <sup>2</sup>		
		Standard	Result	Standard	Result	Standard	Result	Standard	Result	Standard	Result	Standard	Result	Standard	Result
Bashi Reservoir	42º32'31.53"N 41º53'37.83"E	0.5	≥ 0.1	5.0	1,1	0.2	0.02	0.5	0.4	72	69	30	14	4.0	3.24
Ingiri Pumping Station	41°32'32.99"N 41°52'51.51"E		≥ 0.1		1.6		0.03		0.2		68		14		1.37
Ingiri Water Intake	41°29°12.90°N 41°53°26.55°1E		≥ 0.1		1.9		≥ 0.01		0.3		62		13		1.45

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### Pot-01 monitoring measurements

# Water Sanitation Services in Poti

## Monitoring measurements

### 09/07/2016

ration	Hussalt	3.34	2.24	1.4	3.37
Vibro- acceleration m/sec <sup>2</sup>	brebnes2	4.0			
E .	Result	41	7	13	4
Radiation Mr/h	brahnase	30			
	Result	69	89	62	29
Noise db	brebnes2	72			
	Result	0.4	0.3	0.3	0.2
SO; Mg/m²	brabnat2	0.5			
n,	Result	0.02	0.03	≥ 0.01	0.02
NO2 Mg/m	brebner8	0.2			
2	Result	1,1	9.0	6:0	0.5
CO Mg/m³	Standard	5.0			
2	Result	> 0.1	> 0.1	≥ 0.1	≥ 0.1
Dust Mg/m³	brebnet2	0.5			
Coordinates		42°10'50.28°N 41°39'44.76°E	42'09'58,99'N 41'39'51,51"E	42°10°26.39°N 41°39°47,09°E	42'07'54.46'N 41'41'28.26''E
Place of Measurement		Chavchavadze street	Barnovi street	Mzareluas	Guria street

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### **ANNEX B: PROJECT PHOTOS**

Zug-01: Camp Site







Zug-01: Bashi Reservoir



Zug-01: Ingiri- Well Fields



Pot-01: Pumping Station



Poti: Sites for Construction of Small Pumping station



Poti: Sites for Construction of Big Pumping station, instead of existing one



### ANNEX C: IMPLEMENTATION REPORT ON THE ENVIRONMENTAL IMPACT ASSESSMENT

(EIA) /INITIAL ENVIRONMENTAL EXAMINATION (IEE) MITIGATION REQUIREMENTS:

Reference	Requirement	Action to date	Action required/comment
Zug-01			
	All construction materials should be properly segregated and stored adequately to avoid disturbance of residents and businesses	Partially Completed	Contractor agreed to solve the problem within two weeks.
	Around open tranches proper warning signs and safety types should be installed	Partially Completed	
	Proper walkways/planks should be installed across open tranches	Partially Completed	
Pot-01 network			
	All construction materials should be properly segregated and stored adequately to avoid disturbance of residents and businesses!	Not Completed	Contractor promised to improve the situation and send the improved photos
	Tarpaulins cover during materials transportation should be used	Completed	
	Install safety signs, tapes and trench side barriers around all open tranches	Completed	
Poti Camp			
	Topsoil should be stored and protected adequately and watering regularly	Partially Completed	Contractor promised to improve the situation and send the improved photos
	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	

### ANNEX D:

### **Grievance Redress Mechanism**

The GRM allows affected people to appeal any disagreeable decision, practice or activity arising from project implementation.

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.

During the first stage, complaints are discussed within two weeks of being received by the local service centre of UWSCG (e.g. Zugdidi and Poti offices), 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.

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.

When a grievance is solved positively in the first stage, the grievance is closed through an Agreement Protocol, which is reflected in the eDocument – Task Management System.

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

<sup>1</sup> UWSCG and Supervision Consultant (Eptisa) conducted trainings for service center operators covering general procedures of GRM functioning in order to ensure proper coordination of different departments.

<sup>&</sup>lt;sup>2</sup>The **eDocument - Task Management System** was developed by LEPL Financial-Analytical Service of the Ministry of Finance of Georgia. It is an innovative electronic document and task management mechanism for electronically processing of documents. Used by almost all the major budgetary organizations in Georgia, the eDocumentservice offers an opportunity to manage, find, and track documents for information-intensive organizations.

The GRC should make a decision within two weeks after the registration of the grievance. The GRC is staffed as follows: (i) Representative of self-government – the head of committee; (ii) 99. Director/ Manager of UWSCG service centre; (iii) Investments Project Management Division representative of the company; (iv) Representative of local authoritative NGO (according to the claim reference); (v) Stakeholders' female representative; (vi) Stakeholders' informal representative; and (vii) Heads of local municipalities.

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.

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