

Bi-annual Environmental Monitoring Report

Project Number: 43405-023

Reporting Period: January-June 2018

Loan Number 3238-GEO (SF)

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

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July 2018

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ABBREVIATIONS

ADB	Asian Development Bank
DC	Design Consultant
DEPRP	Department of Environmental protection, Resettlement and Construction Permit
DIPDR	Department of International Procurement and Donors Relations
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
IPMO	Investment Program Management Office
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. 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 2018 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. Construction of Sewerage System in Poti (Pot-01) and 3. Construction of Wastewater Treatment Plant in Poti (Pot-02). 4. Construction of Water Supply System in Jvari (Jvari-01).

B. The Following Projects are Financed under Tranche 4:

Construction of Water Supply System in Zugdidi (Zug 01)

5. 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.

Construction of Sewerage System in Poti (Pot-01)

6. 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)

7. The project comprises of the construction of new Wastewater Treatment Plant with the capacity of 11,663 m³/day for Poti.

Construction of Water Supply System in Jvari (Jvari-02)

8. The major works to be implemented for rehabilitation and improvement of Jvari water supply system are following: construction of wells on the well field near the village Lia; installation of about 4 km long transmission pipeline; replacement of distribution pipes in the town; rehabilitation of existing reservoir or construction of new one depending on results of detailed investigation; construction of new pump station.

Supervision Consultant for T4 of USIIP

9. Supervision Consultant for Tranche 4 of USIIP is “SAFEGE France with Engineering Solution LLC Georgia”.

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

10. During the reporting period, project scheduled construction activities were carried out under Zug-01 and Jvari-01 projects. Construction progress of Zug-01 and Jvari-01 projects during the period of January-June 2018 is presented in Table 1 below. There were no construction activities under Pot-01 and Pot-02 projects as yet.

Construction progress during the previous 6 months under Zug-01 and Jvari-01 projects (January-June 2018)

Table 1: Project Progress during the Previous 6 Months under Zug-01 project

Zug-01	Zugdidi Water Supply System Construction
Sites	Zugdidi Water Pipeline Network; Bashi Reservoir, Ingiri Pump Station, Transformer Building & Water well Field
Works undertaken during January-June 2018	Bashi existing reservoir demolished, 3 new reservoirs constructed. Ingiri Pump station, Reservoir, Chlorination building, Transformer Building and Operational building concrete work construction finished 100%.
Zug-01	Zugdidi Transmission Pipelines

Zug-01	Zugdidi Water Supply System Construction																																								
Works undertaken during January June 2018	<p>Executed Jan-June 2017. Total Completed %:</p> <table> <tr><td>OD 63 PE – 7650m</td><td>100%</td></tr> <tr><td>OD 75 PE – 27730m</td><td>100%</td></tr> <tr><td>OD 90 PE – 15870m</td><td>100%</td></tr> <tr><td>OD 110 PE – 132353m</td><td>97.8%</td></tr> <tr><td>OD 125 PE – 7365m</td><td>93.7%</td></tr> <tr><td>OD 140 PE – 3511m</td><td>75%</td></tr> <tr><td>OD 160 PE - 1102m</td><td>74.4%</td></tr> <tr><td>OD 180 PE – 9465m</td><td>85.2%</td></tr> <tr><td>OD 200 PE – 1438m</td><td>89.8%</td></tr> <tr><td>OD 225 PE – 4844m</td><td>96%</td></tr> <tr><td>OD 250 PE - 4570m</td><td>100%</td></tr> <tr><td>OD 280 PE – 803m</td><td>84.5%</td></tr> <tr><td>OD 315 PE – 2025m</td><td>83%</td></tr> <tr><td>OD 355 PE - 4190m</td><td>100%</td></tr> <tr><td>OD 400 PE – 860m</td><td>85.1%</td></tr> <tr><td>OD 450 PE – 2833m</td><td>89.3%</td></tr> <tr><td>OD 500 PE – 2480m</td><td>100%</td></tr> <tr><td>OD 710 PE - 2 m</td><td>5 %</td></tr> <tr><td>OD 400 PE – 1242m</td><td>56.7 % (Over flow)</td></tr> <tr><td>DN 700 DCI – 10430m</td><td>79.9%</td></tr> </table> <p>Total: 252018 m 99.8 %</p>	OD 63 PE – 7650m	100%	OD 75 PE – 27730m	100%	OD 90 PE – 15870m	100%	OD 110 PE – 132353m	97.8%	OD 125 PE – 7365m	93.7%	OD 140 PE – 3511m	75%	OD 160 PE - 1102m	74.4%	OD 180 PE – 9465m	85.2%	OD 200 PE – 1438m	89.8%	OD 225 PE – 4844m	96%	OD 250 PE - 4570m	100%	OD 280 PE – 803m	84.5%	OD 315 PE – 2025m	83%	OD 355 PE - 4190m	100%	OD 400 PE – 860m	85.1%	OD 450 PE – 2833m	89.3%	OD 500 PE – 2480m	100%	OD 710 PE - 2 m	5 %	OD 400 PE – 1242m	56.7 % (Over flow)	DN 700 DCI – 10430m	79.9%
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Zug-01	Zugdidi Reservoirs & Pump Stations
Site	Bashi Reservoir
Works undertaken during January June 2018	Concrete works for 3 reservoir including chlorination station and distribution chamber are completed 100%.
Site	Ingiri Pumping Station
Works undertaken during January June 2018	Ingiri Pump station, Reservoir, Chlorination building, transformer building and Operational building concrete work construction finished 100%.
Works undertaken during January June 2018	<p>Ingiri Well Field:</p> <p>Mobilization – 100%</p> <p>All 9 wells 100% Finished</p>

Table 1: Project Progress during the January June 2018 Jvari-01 project

Jvari	Jvari Water Supply System Construction	
Sites	Jvari Water Pipeline Network	
Jvari	Jvari Transmission Pipelines	
Works undertaken during January June 2018	Executed January 2018 – July 2018.	Total Completed %:
	OD 63 PE - 1497	62.5 %
	OD 90 PE – 1483m	35.5 %
	OD 110 PE – 13,387m	72.3 %
	OD 160 PE - 2457 m	49.9 %
	OD 200 PE - 1358m	61.9 %

11. As it was mentioned above no construction activities undertaken during the proposed reporting period under Poti-01 project. Only a new temporary office was installed in the current camp area.

12. During the reporting period no construction activities were carried out under the **Pot-02 project**. Due to the fact that, almost the entire construction area is covered with vegetation/trees the botanical study was conducted prior to removal of trees by an independent expert. Photos of Construction site is presented in Annex B. Only two red book listed trees - Walnut tree *Juglans regia* revealed during the study. Both trees are located at the entrance to the construction site and are properly fenced and marked to protect and preserve them during construction. The remaining trees will be removed in accordance with relevant SSEMP/EMP. All details will be provided in the next EMR in July-December 2018.

1.2 Changes in Project Organization and Environmental Management Team

Agencies Involved in Investment Program Implementation

13. 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.

14. Ministry of Environmental Protection and Agriculture of Georgia (MEPA). MEPA has the overall responsibility for protection of environment in Georgia. The Department of Permits of MEPA is responsible for reviewing EIAs and for issuance of the Environmental Permits. MEPA is the main state body pursuing state policy in the sphere of environment. Their functions for regulating economic or development activities with regard to environmental protection include:

- Issuing permits for project development (Environmental Decision)
- Setting emission limits and issuing surface water intake and discharge consents
- Responding to incidents and complaint

15. 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. In June 2018, the Director and Deputy Director of UWSCG were changed. Ms. Ekaterina Galdava was appointed as the new director, Ms. Maia Gikoshvili became the new Deputy Director of UWSCG. Investment Program Management Office (IPMO) under UWSCG is an International Procurement and Donors Relations Department. Department of Environmental Protection, Resettlement and Construction Permit (DEPRP) under USIIP replaced the existing Unit of Resettlement and Environmental Protection and consist of six staff members, including Head of Department and Head of Construction Permit Unit.

16. UWSCG as responsible IA for the project recruited a Supervision Consultant (SC) - Eptisa. The national and international team of consultants assists UWSCG in the supervision of the construction of subprojects under the USIIP. The SC also provides capacity building training to contractor staff in the management and operation and maintenance of the subprojects. The SC assists UWSCG in ensuring that the subprojects are implemented according to the specified standards. SC assignment also includes the supervising of the implementation of the environmental management plans.
17. 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 ¹SEMPs, Site Specific EMPs and Topic Specific EMPs of subprojects, an Environmental Management Specialist (EMS) is employed by the SC/Eptisa. SC/EMS conducts routine observations and surveys of project sites, issues non-compliance notes, prepares quarterly environmental reports and submits these to UWSCG.
18. The Contractor has the following obligations:
 - to prepare Site Environment Management Plans SEMPs with further Site Specific EMPs Topic Specific EMPs;
 - to employ Environmental Consultant responsible for developing and implementing the construction phase SEMPs and for providing the corresponding information to UWSCG and SC;
 - to develop Solid Waste Disposal Plan and agreed the MEPA and Local Government
19. DC is responsible for developing and incorporation of mitigation measures in design and construction.
20. The environmental specialist (ES) is hired by UWSCG under the USIIP to assist and advise the DEPRP 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 DEPRP in EARF implementation, in particular, reviewing IEE/EIA Reports and overseeing implementation of SEMPs and in training and capacity-building activities. The ES prepares bi-annual and annual environmental monitoring reports and submits to ADB.
21. DEPRP is responsible for the implementation of mitigation and monitoring measures during construction and operation of subprojects under USIIP. Currently DEPRP is staffed with a Head of Department. Head of Construction Permission Unit and 4 specialists, those are responsible for resettlement, environmental protection and construction permission issues.

¹According to new Monitoring Manual of ADB for Environmental Safeguards Implementation, since June 2018 instead of Site Specific Environmental Management Plans (SSEMPs) a "Site Environment Management Plan" (SEMP) with further Site Specific EMPs and Topic Specific EMPs must be developed by the Contractor.

22. 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

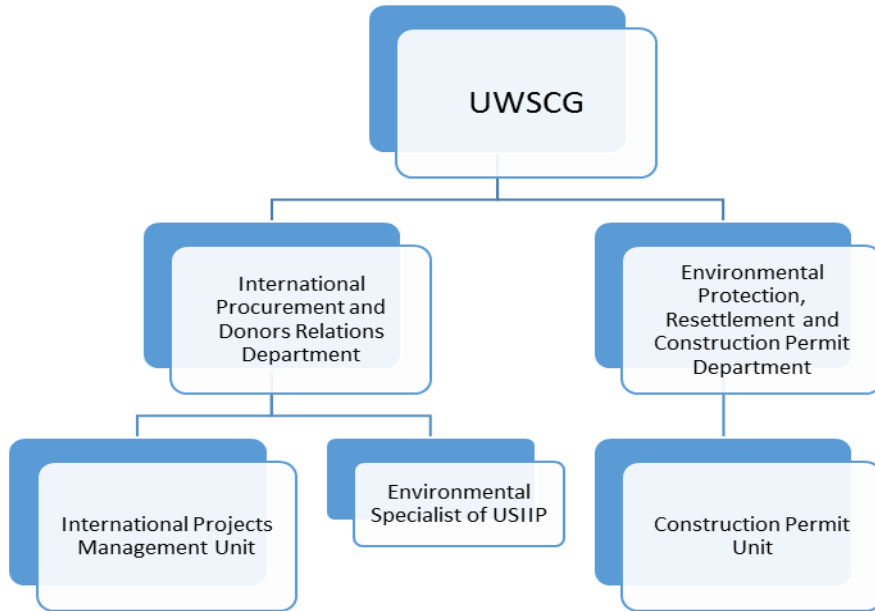
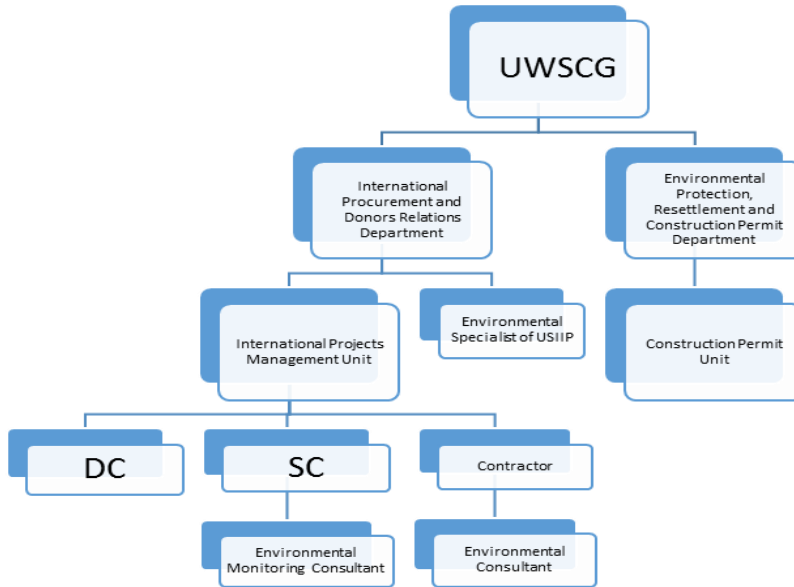


Figure 2: Structure Diagram of the Agencies Involved in Investment Program Implementation



1.3 Relationships with Contractors, Owner, Lender, etc

23. 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.
24. 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.
25. Oversight of the USIIP with regards to environmental management is the responsibility of the environmental safeguards team, in particular UWSCG/DEPRP and the Environmental Specialist of USIIP.
26. The team has constant communication with the Supervision Consultant, Contractor, reviews/ comments all environmental reports submitted by DC, SC and contractors.
27. SSEMPs were prepared by contractor, endorsed by SC/Eptisa and approved by UWSCG/DEPRP.
28. 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.
29. ADB oversees project sites regularly and gives clear instructions for the project sites improvements with regard to environmental safeguards.
30. To resolve the observed environmental safeguard issues, the regular Environmental Meetings are organized with participation of UWSCG/IPMO/DEPRP, Safage and Contractors. During the meetings environmental issues and implementation of the mitigation measures are discussed.
31. 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.
32. Contractor of Zug-01 project during the reporting period signed agreements with the following sub-contractor:
 - 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.

33. 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.
34. Project organization for the awarded contracts listed above is given in the Table 2 below.

Table 2: List of Contracts under T4 – ZUG-01, Pot-01, Pot-02, Jvari-01 and Selection of Supervision Consultants under T4

Contract #	Sub-project titles	Employer	Contractor	Contract Signature date	Contract Final Date
Contract No: P43405-ICB-Zug-01	Zug-01	UWSCG	AS Inshaat-N LLC (Azerbaijan)	26-Oct-15	25-Oct-17
Contract No: UWSCG/USIIP/QCBS/ 02-2014	QCBS-02-2014	UWSCG	SAFEGE (France) with Engineering Solution LLC (Georgia)	2-Jul-15	8-Jun-18
Contract No: P43405-DC-Jvari-01	Jvari-01	UWSCG	AS Inshaat-N LLC (Azerbaijan)	17-Jan-17	11-July-19
Contract No: P43405-ICB-Pot-01	Pot-01	UWSCG	TAHAL Group BV	20-Dec.-17	06-Jun-20
Contract No: P43405-ICB-Pot-02	Pot-02	UWSCG	JV “Pfeiffer - EMIT” comprised by “Ludwig Pfeifer Hoch – and Tiefbau GmbH7Co. KG (Germany)” and “EMIT Group – Ercole Marelli Impianti Tecnologici S.r.l. (Italy)	21-Dec.-17	01-Feb.-20

2. PART II - ENVIRONMENTAL MONITORING

35. Individual and joint on-site monitoring activities were conducted by Environmental Monitoring Specialist of SC and Environmental Specialist of USIIP on a regular basis, during the period January-June 2018. 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 Jvari-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 Top Soil
 - Removal of Surplus Soil
 - Backfilling of Trenches
 - Reinstatement Activities
42. In accordance with the IEE, and the accompanying Environmental Monitoring Plan (EMP), the Contractor is required to undertake parametric measurements and observations on air quality, noise and socio-cultural resources. Locations for the measurements were initially identified in the IEE. Accordingly, the monitoring guidelines were set as shown in the Table 3 below. Only Zug-01 and Jvari-01 is reported in this EMR.

Table 3: Parametric Measurement Guidelines

Parameters	Frequency & Location	Remarks
Zug-01		
Air Quality	Air Quality Every 3 months Mukhnari Reservoir, Networks, Transmission Main	Watering site during excavation works to avoid dust spreading Conduct measurements of Dusts Mg/m ³ ; CO Mg/m ³ ; NO ₂ Mg/m ³ ; SO ₂ Mg/m ³
Noise	Noise, Every 3 months Mukhnari Reservoir, Networks, Transmission Main	Ensure that all equipment & vehicles used for construction activity are in good condition Limiting working hours to 8 am – 6 pm
Incorrect surplus/waste soil management	Monthly during the site Inspection and audit	Utilize surplus/waste soil for beneficial purposes such as in construction or to raise the ground-level of low lying sites. Dispose extra waste soil at special disposal place identified by Municipality
Impact on Flora and Fauna	Monthly during the site Inspection and audit	Avoid tree cutting In unavoidable cases, plant four trees of same species for each tree that is cut for construction
Cultural heritage Disturbance to cultural resources	Every time along the alignment Archaeological & Cultural Properties	Contractor shall put in place a protocol for conducting any excavation work, to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved.

Parameters	Frequency & Location	Remarks
		Calling in the state archaeological authority if a find is suspected, and taking any action they require to ensure its removal or protection.
Jvari-01		
Incorrect surplus/waste soil management	Monthly during the site Inspection and audit	Utilize surplus/waste soil for beneficial purposes such as in construction or to raise the ground-level of low lying sites. Dispose extra waste soil at special disposal place identified by Municipality
Impact on Flora and Fauna	Monthly during the site Inspection and audit	Avoid tree cutting In unavoidable cases, plant four trees of same species for each tree that is cut for construction
Cultural heritage Disturbance to cultural resources	Every time along the alignment Archaeological & Cultural Properties	Contractor shall put in place a protocol for conducting any excavation work, to ensure that any chance finds are recognized and measures are taken to ensure they are protected and conserved. Calling in the state archaeological authority if a find is suspected, and taking any action they require to ensure its removal or protection.

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 SO₂ – 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). IFC/WHO standards for noise is provided in Table 4 below.
46. Noise impacts should not exceed the levels presented in Table 4, in accordance with Georgian regulations - Decree No. 297/N “On Approval of Environmental Quality Norms” (August 16, 2001 of the Ministry of Labor, Health and Social Affairs) and IFC and World Health Organization (WHO) 1999, or result in a maximum increase in background levels of 3 dB at the nearest receptor location off-site.

Table 4: Noise Level Guidelines

Noise	dBA		dBA	
	National Regulations		IFC/WHO	
Receptor	Daytime 07:00 - 22:00	Nighttime 22:00 - 07:00	Daytime 07:00- 22:00	Nighttime 22:00- 07:00
Residential; institutional; educational	55	45	55	45
Industrial; commercial	70	70	70	70

47. The monitoring measurements within the framework of the Zug-01 project was conducted by the contractor in the nearest sensitive receptors in June 2018 (See Table 5 and Annex 1). Locations are included in the table below. The next monitoring measurements will be conducted in September 2018 and results will be reflected in the next July - December 2018 EMRs. According to data received in June 2018 noise does not exceed the National Regulations and IFC/World Health Organization (WHO), 1999 standards. However some measurement results, such as PM exceed the WHO guideline values and therefore additional mitigated measures, those are provided in Table 11 below are required.
48. It should be noted also that all measurements carried out at construction sites, were temporary and conducted during the daytime from 12:30pm to 15:00pm and no

complaints were received from the local population about the noise during the reporting period.

Table 5: Monitoring Measurements under Zug-01 Project (a)

Plaice of measurement	Dust Mg/m ³		CO Mg/m ³		No ₂ Mg/m ³		SO ₂ Mg/m ³		Noise dBA Daytime 07:00-22:00 <i>Note: National and WHO standards are provided in Table 4</i>		Vibro - accelevation mm/sek		Radiation mR/h	
	standard	result	standard	result	standard	result	standard	result	standard	result	standard	result	standard	result
National standards	0,5		5,0		0,2		0,5		See Table 4		4.0		30	
IFC/WHO standards	(* IFC does not have a standard for "inorganic dust". Instead IFC applies standards for		N/A		0,2/ 1 Hour 0,04/1 Year		0,5- 10 min 0,02 - 24		See Table 4					
Rustaveli Street 423023.52 N 415116.18 E	0.5	PM ₁₀ - 0.04 PM _{2.5} - 0.15	5.0	1.3	0.2	0.02	0.5	≥ 0.1	55 70	56. 6	4.0	2.4	30	12
Kostava Street 423022.36 N 41528.93 E		PM ₁₀ - 0.06 PM _{2.5} -		1.7		0.03		≥ 0.1		60. 3		2.1		10

(Industrial; commercial)		0,09												
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49. The monitoring measurements within the framework of the Jvari-01 project was conducted by the contractor in the nearest sensitive receptors in June 2018 (See Table 5 and Annex 1). Locations are included in the **Table 6** below. The next monitoring measurements will be conducted in September 2018 and results will be reflected in the next July December 2018 EMRs. According to data received in June 2018 noise exceeded the standards required by National Regulations and IFC/World Health Organization (WHO), 1999, in Jvari and therefore additional measures are required, those are presented in **Table 11** below: Recommendations to Address Environmental Issues under Jvari-01 project. It should be noted also that all measurements carried out at construction sites, were temporary and conducted during the daytime from 15:30pm to 17:30pm and no complaints were received from the local population about the noise during the reporting period.

Table 6: Monitoring Measurements under Jvari-01 Project (a)

Plaice of measurement	Dust Mg/m ³		CO Mg/m ³		No ₂ Mg/m ³		SO ₂ Mg/m ³		Noise dB Daytime 07:00- 22:00 <i>Note: National and WHO standards are provided in Table 4</i>		Vibro - acceelation m/sek		Radiation mR/h	
	Standard	Result	Standard	Result	Standard	Result	Standard	Result	Standard	Result	Standard	Result	Standard	Result
Tsereteli Street 424326.89 N 42221.84 E	0.5	PM ₁₀ - 0.04 PM _{2.5} - 0.15	5.0	1.1	0.2	0.0 2	0.5	≥ 0.1	55 70	57.6	4.0	3.1	30	9
Kostava Street 424322.89N 42227.78E		PM ₁₀ - 0.06 PM _{2.5}		1.2		0.0 3		≥ 0.1		61.3		2.4		12

		- 0,09											
Dgebuadze Street 424324.55N 42214.14E		PM ₁₀ - 0.06 PM _{2.5} - - 0,09	1.2		0.0 4		≥ 0.1		59.3		2.4		10

D. Health and Safety

50. No incident and near misses were recorded during the reporting period January-June 2018.

3. PART III - ENVIRONMENTAL MANAGEMENT

3.1 The Environmental Management System, Site-Specific Environmental Management Plan (SSEMP) and work plans

SSEMPs prepared under Zug-01, Poti-01, Poti-02 and Jvari-01 projects (January-June 2018)

51. During the reporting period SSEMP was prepared by contractor, endorsed by SC and approved by UWSCG for Poti WWTP under Pot-02 project. SSEMP is reviewed/commented by the RETA International-Regional Environmental Consultant of ADB under RETA 8663 - Ms. Ketii Dgebuadze.
52. Draft SSEMP for Lia well fields was submitted by supervisor company "Safege" under Jvari-01 project during the reporting period as well. SSEMP was prepared by contractor, enforced by Supervisor Company and revised by UWSCG. Revised version with relevant comments were returned back to contractor for final improvement. SSEMP for Lia Well fields will be approved in the next reporting period and reflected in EMR July-December 2018.
53. The following SSEMPs are prepared under Zug-01 project; Bashi Reservoir, Ingiri Water Well Field and Pumping Station. All SSEMPs are prepared by Contractor, endorsed by SC/Safege, approved by UWSCG and reviewed/commented by the RETA Regional Environmental Consultant of ADB under RETA 8663 - Ms. Ketii Dgebuadze. SSEMPs prepared during the January-June 2018 are presented below in the Table 6.

Table 6: SSEMPs Prepared during the Reporting Period (January – June 2018)

No	Project/Site	Date of Approval
1	Pot-02/Poti WWTP	31 May, 2018
2.	Jvari-01/Lia Well Fields	<i>Note: revised SSEMP is sent to CC and SC for final improvement on 28 June 2018</i>

3.2 Site Inspections and Audit

54. Regular inspection and monitoring of Zugdidi and Jvari construction sites have been conducted by the Environmental Specialist of Supervision Consultant/Safege. Joint inspection and audit has been carried out by the environmental SC and UWSCG on the regular basis as well.
55. Site inspection monitoring and audit during the reporting period have been carried out on: 16,17 January 2018, 26-28 January 2018; 20,21 February 2018; 21-23 March, 2018; 24 April, 25 May 2018 and 29-30 June 2018. The schedule of conducted monitoring and audit during the reporting period is presented in the Table 7 below.

Table 7: The Schedule of Conducted Audits and Monitoring during the Reporting Period

#	Zug-01 and Jvari-01 Site visits	Organization	Date
1	Day-to-Day Site Inspection	Environmental Specialists of Contractor under Zug-01, Pot-02 and Jvari-01 Projects	1 January – 30 June 2018
	Site Monitoring and Inspection Zug-01, Jvari-01 projects	Environmental specialists of Safege	16,17 January 2018
2	Site Monitoring and Audit	Environmental specialist of USIIP, environmental specialists of Safege, International-Regional Environmental Safeguards Consultant Ms. Keti Dgebuadze and Mr. Duncan Lang, Environmental Specialist, ADB	26-28 January 2018
3	Site Monitoring and Inspection Zug-01, Jvari-01 projects	Environmental specialists of Safege	20,21 February 2018
	Site Monitoring and Inspection Jvari-01 project	Environmental specialists of Safege	21-23 March 2018
4	Site Monitoring and Inspection Zug-01, Jvari-01 projects	Environmental specialist of USIIP, environmental specialists of Safege	24 April 2018
5	Site Monitoring Zug-01, Jvari-01 projects	Environmental specialist of USIIP, Environmental specialist of Safege	25 May 2018
8	Site Monitoring Zug-01	Environmental specialist of USIIP, Engineer of Safege	29-30 June 2018

56. Several non-compliances have been observed during the site visits under Zug-01 and Jvari-01 projects and verbal instructions have been given to contractor's relevant staff.
57. The contractors were always informed to improve the situation on sites within the set deadline and to send photos of improvements or corrective action plans to UWSCG.
58. A summary of the identified issues during the site monitoring by EMS/SC and USIIP ES, recommended mitigations and the status of implementation is presented in **Annex D**.

3.2 Non-Compliance Notices

Zug-01

59. Non-Compliance Notice (NCN) has been issued by Environmental Consultant of Safege to the Contractor under Zug-01 project and instructed to improve the environmental safeguard requirements, especially on camp and Ingiri well fields sites. Contractor improved the situation and sent relevant photos of sites to UWSCG.
60. Track record system is well established and all documents including all permits, licenses and agreements, IEE, SSEMPs are on place (kept in separate folder) under Zug-01 and Jvari-01 projects and available at camp site.

3.3 Corrective Action Plans under Zug-01 and Jvari0-1 projects

61. Actions Taken during the reporting period of January-June 2018 for improvement of Mitigation are presented in the **Table 8** below:

Table 8: Actions taken for Implementation of Mitigation Measures under Zug-01, Jvari-01 Project by the end of June 2018

Construction Site	Environmental Issues	Actions taken
Zug-01		
Camp Site and Ingiri Well Fields	Clean existing Oil spills and prevent spillages in future	All improvements were done by Contractor after the instruction given by the Environmental Specialists of USIIP and Safege
	Clean all kind of waste daily and store properly under shelters of in the buildings	
	Spill/Contamination prevention and Vehicle/Heavy equipment inspection refreshment trainings should be carried out for the relevant contractor's staff ASAP	
	Special training should be provided to the staff regarding housekeeping at the construction sites and include this issue in daily Toolbox Talks.	
	Drip treys should be provided and used at the vehicle and heavy equipment maintenance area/ Re-fuelling points.	
	Spill Response Equipment should be placed on site; Spill kits should be placed at the vehicle and heavy equipment maintenance area, fuel and lubricant storage and refueling points.	
	All vehicles and heavy equipment should be inspected on daily basis (use relevant checklists), in case of leakage finding, prohibit usage of the damaged Vehicles/Heavy equipment.	
Jvari-01		
Network	Surplus soil should be removed to the designated	Contractor is instructed


Construction Site	Environmental Issues	Actions taken
Zug-01		
	spoil area.	to improve the situation on site (Additional recommendations to contractor are provided in Table 11 below)
	Entrance to the spoil disposal should be controlled by flagman	
	Use tarpaulins to cover loose material that is transported to and from the site by truck	
	Clean wheels and undercarriage of haul trucks prior to leaving construction site	
	Spill response equipment must be available at sites	
	Drip trays should be provided for each equipment (generator, motor pumps, etc)	

62. Annual Environmental Compliance Safeguard Review Mission was carried out by ADB on 27-30 January 2018 to review environmental safeguards compliance of USIIP projects.

3.4 Actions taken to reflect the findings of ADB mission carried out on 27-30 January 2018

Table 9: Status of Findings of ADB Mission Carried Out on 27 – 30 January 2018

Project	Specific Issues	Deadline for submission/Implementation	Implementation Status
Status of findings of ADB mission carried out on 27-30 January 2018			
Construction of Water Supply System in Zugdidi – USIIP, T 4			
Zug-01			
	<u>Bashi Reservoir:</u> Containers with municipal and hazardous waste are stored at special designated area with concrete base and roofing. Wood waste will be handed over to the sub-contractor for secondary use.		Completed, Wood Waste removed from construction site.

Project	Specific Issues	Deadline for submission/Implementation	Implementation Status
			
	<p>ADB to formally request that the PIU and the supervision consultants for the USIIP program employ dedicated Health and Safety personnel. These personnel must be additional to existing staff (particularly at PIU level) to ensure that sufficient capacity is present to cover H&S on this large portfolio of projects. The staff personnel must have the relevant qualifications and experience.</p>	Q1, 2018	Not Completed, since the major construction activities on Bashi reservoir and Ingiri well fields and Pumping Station are completed under Zug-01 project.

3.5 Actions taken regarding the action plan of the EMR July-December 2017:

Table 10: Status of implementation of action plan of July-December 2017

Specific issues: Recommendations Zug-01	Implementation Status
<p>Conduct monitoring of environmental quality under Zug-01 project (Bashi Reservoir, Ingiri well fields and pumping stations and network) in March 2018.</p>	<p>Completed in June 2018 Measurement data are reflected in proposed EMR January-June 2018</p>
<p>Carry out noise measurement at the nearest sensitive receptors and at the construction site by the end of October 2017.</p>	<p>Completed in June 2018, Measurement data are reflected in proposed EMR January-June 2018</p>

Specific issues: Recommendations Zug-01	Implementation Status
	<p>Partially Completed.</p> <p>Selection of Public Awareness specialist by Supervision Company Safege is still pending due to the lack of experience and qualification of candidates, offered by Safege to UWSCG and ADB.</p> <p>But despite the above mentioned, UWSCG and its Environmental Specialist held regular meetings with the local population during visits to the site within the framework of the Zug-01 and Jvari-01 projects.</p> <p>PA Consultant will be selected in the next reporting period of July-December 2018 and Public Awareness activities carried out by SC will be reflected in the next EMR July-December 2018.</p>
<p>Contractor to develop, SC to endorse and UWSCG to approve the following SSEMPs within the framework of Poti-01, Poti-02 and Jvari-01 projects.</p>	<p>Partially Completed.</p> <p>SSEMP for Poti WWTP approved in May 2018.</p> <p>Draft SSEMP is submitted to UWSCG for its approval under Jvari-01/Lia Well Fields.</p>

3.6 Consultations and Complaints

Public Awareness Activities:

63. Consultation meeting with people living in close proximity to the construction site under Zug-01 and Jvari-01 projects were undertaken by Environmental Specialists of USIIP and Safege, during the reporting period.
64. The purpose of above mentioned consultation was: 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 and to mitigate impact when avoidance is not possible.

Trainings:

- 65.** On site environmental safeguard training were organized for environmental team of Zug-01 project on a regular bases during the site visits. Environmental specialists of contractor was introduced with all necessary safeguard requirements of ADB/SPS 2009.
- 66.** 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.
- 67.** The issues of discussion were as follows:
 - Site-specific Environmental Management Plans and their implementation
 - Site management

Grievance redresses mechanism (GRM)

- 68.** 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 E.
- 69.** During the reporting period, the contractor received about 7 complaints, which were resolved in the first stage. These complaints were mainly related to the timely removal of surplus soil from the construction sites, damage of the main roads and blocking access to private homes during the construction of trenches in the framework of the Zug-01 and Jvari-01 projects. As mentioned above, all complaints were resolved at the first level by involving representatives of the local service center UWSCG, the Contractor and the SC /Safege.
- 70.** GRM Focal points of contractors were appointed at the sites under Zug-01 and Jvari-01 projects during the reporting period, January-June 2018.

PART IV – CONCLUSIONS AND ACTION PLAN FOR THE NEXT PERIOD

4.1 Conclusions and recommendations

- 71.** As presented in this report, Tranche-IV of this Investment Program is being implemented in compliance with the ADB Safeguards Policy Statement, 2009, National Legislation and overall EARF;

72. Necessary instructions have been given to the Contractor by UWSCG and SC to follow the EMPs and SSEMPs under Zug-01 and Jvari-01 project;
73. More detailed recommendations with indication of the entities responsible for their implementation are provided in the Table 11 below:

Table 11: Recommendations to Address Environmental Issues under Zug-01 and Jvari-01 projects

Recommendations Zug-01, Jvari-01	Responsible party
Zug-01	
Clean existing Oil spills and prevent spillages in future	Contractor is requested to keep the standard
Clean all kind of waste daily and store properly under shelters of in the buildings	
Spill/Contamination prevention and Vehicle/Heavy equipment inspection refreshment trainings should be carried out for the relevant contractor's staff ASAP	
Special training should be provided to the staff regarding Housekeeping at the construction sites and include this issue in daily Toolbox talks.	
Drip treys should be provided and used at the vehicle and heavy equipment maintenance area/ Re-fuelling points	
Spill Response Equipment should be placed on site; Spill kits should be placed at the vehicle and heavy equipment maintenance area, fuel and lubricant storage and refueling points	
Environmental Quality Measurement results of PM exceed the HWO guideline standards	<p><i>Following Instructions are given to contractor to improve the situation on sites:</i></p> <ul style="list-style-type: none"> • Cover or damp down by water spray on the excavated mounds of soil to control dust generation; • Damp down unsatisfied /bad condition roads to avoid dust generation while using for transport of waste/material • Use tarpaulins to cover loose material that is transported to and from the site by truck • Control dust generation while unloading the loose material (particularly aggregate and sand) at the site by sprinkling water/unloading inside barricaded area
Jvari-01	

Recommendations Zug-01, Jvari-01	Responsible party
Zug-01 Jvari-01	
Surplus soil should be removed to the designated spoil area.	Contractor is given instruction to remove the surplus soil immediately to the special spoil area.
Entrance to the spoil disposal should be controlled by flagman	Contractor is strongly instructed to follow all recommendations given during the site visits and monitoring, prepare CAP and send to UWSCG immediately. Final improvements will reflected in the next EMR July-December 2018
Use tarpaulins to cover loose material that is transported to and from the site by truck	
Clean wheels and undercarriage of haul trucks prior to leaving construction site	
Spill response equipment must be available at sites	
Drip trays should be provided for each equipment (generator, motor pumps, etc)	
Noise from the construction activities should not cause disruption and nuisance to nearby community and other sensitive receptors (i.e. school, hospitals).	Instruction are given to contractor to improve the situation and to conduct following mitigation measures for exceedances of noise measurement data: <ul style="list-style-type: none"> • Plan activities in consultation with SC and IPMO/UWSCG so that construction works with the greatest potential to generate noise are planned during periods of the day that will result in least disturbance; • Noisy construction activities will be avoided during night time; • All construction equipment and vehicles shall be well maintained, regularly inspected for noise emissions; • Impose speed limits on construction vehicles to minimize emissions along areas where sensitive receptors are located (i.e. temples, hospitals, schools, houses).

Recommendations Zug-01, Jvari-01	Responsible party
Zug-01	
<p>Environmental Quality Measurement results of PM exceed the HWO guideline standards</p>	<p><i>Following Instructions are given to contractor to improve the situation on sites:</i></p> <ul style="list-style-type: none"> • Cover or damp down by water spray on the excavated mounds of soil to control dust generation; • Damp down unsatisfied /bad condition roads to avoid dust generation while using for transport of waste/material • Use tarpaulins to cover loose material that is transported to and from the site by truck • Control dust generation while unloading the loose material (particularly aggregate and sand) at the site by sprinkling water/unloading inside barricaded area

4.2 Action Plan for the next period

74. Contractor, SC, UWSCG/DEPRP, UWSCG/PR department to carry out comprehensive Public Awareness activities within the Zug-01, Jvari-01, Pot-01 and Pot-02 projects (July-December 2018).
75. Conduct monitoring of environmental quality under Zug-01, Poti-01, Poti-02 and Jvari-01 project sites in September 2018 (see Table 12 below).
76. Contractor to develop, SC to endorse and UWSCG to approve the SEMP's and further Site Specific EMP's and Topic Specific EMP's within the framework of Poti-01, and Jvari-01 projects.
77. The specific plan for measurement is as follows:

Table 12: Conduct Monitoring of Environmental Quality under Zug-01, Poti-01, Poti-02 and Jvari-01 Projects

Parameters	Quarterly measurement
Dust	September 2018
Vibration	September 2018
Carbon monoxide	September 2018
Nitrogen dioxide	September 2018

Noise	September 2018
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ANNEXES:

ANNEX A: MONITORING MEASUREMENT DATA

Zug-01, Jvari-01 Monitoring Measurements (June 2018)

1. Introduction

It is proposed to improve the water supply system in Zugdidi and Jvari under the Asian Development Bank (ADB) funded Urban Services Improvement Investment Program. This Investment Program, implemented in seven towns, will develop the water and sanitation services, which will improve quality of life and optimize the social and economic development.

Zugdidi, situated 258 km west of Tbilisi, the capital of Georgia and 30 km of Black sea coast, is the administrative center of the Samegrelo-Zeda Svaneti Region. UWSCG's Zugdidi Service Centre operates the water supply system in Zugdidi City and a number of outlying small towns and villages including Jvari.

The Zugdidi water supply sub-project involves the development of a new well field in Inghiri, south of Zugdidi, the construction of transmission mains, of one pumping station, of one reservoir and of the distribution network.

2. Regulatory Requirements

The environmental quality standards on the territory of Georgia are regulated by Decree No 287N of August 16, 2001 of the Minister of Labor, Health and Social Affairs of Georgia "On the approval of the environmental quality standards" (State Registration Code 470.230.000.11.119.004.920).

The following amendments were made to the above-mentioned decree:

1. Decree No 38/N of February 24, 2003 of the Minister of Labor, Health and Social Affairs of Georgia, SSM III, №16, 06.03.2002, Article 150
2. Decree No.251/N of the Minister of Labor, Health and Social Affairs of Georgia of September 15, 2006– SSMIII, №129, 20.09.2006, Article 1716
3. Decree No.351/N of the Minister of Labor, Health and Social Affairs of Georgia of December 17, 2007– SSMIII, №179, 18.12.2007, Article 1974
4. Decree No.304/N of the Minister of Labor, Health and Social Affairs of Georgia of September 18, 2009– SSMIII, №115, 22.09.2009, Article 1312
5. Decree No.98/N of the Minister of Labor, Health and Social Affairs of Georgia of April 14, 2010– SSMIII, №39, 14.04.2010, Article 622
6. Decree No.350/N of the Minister of Labor, Health and Social Affairs of Georgia of October 25, 2010 - SSMIII, №138, 26.10.2010, Article 2000
7. Decree No.01-24/N of the Minister of Labor, Health and Social Affairs of Georgia of May 17, 2012 – web-site, 17.05.2012

2. Description of the works to be accomplished

Under the agreement concluded between the Construction Contractor AS Inshaat-N LLC, and "Eco-Spectri" Ltd., the environmental quality analysis was accomplished at different points, in particular on the territory of Zugdidi (at Rustaveli and Kostava streets) and Jvari (Tsereteli, Gogebashvili and Dgebuadze streets), where the project construction works are in progress, the environmental quality analysis of the adjacent area was done.

4. Accomplished measurements and results

4.1 Noise and Vibration

The Construction Contractor carried out the construction works in near Rustaveli and Kostava streets. The trenches had been excavating at sites and the trenches were filled in some of them in the city Zugdidi and near the streets Tsereteli, Gogebashvili and Dgebuadze in Jvari.

In all cases, the noise level in the immediate vicinity of the techniques varies within 60-80 dB. However, the noise level sharply reduced after 20-25 m and was within 55-70 dB in the vicinity of the nearest buildings and premises.

As a rule, noise caused by moving equipment's is reduced at some distance. Such reduction has logarithmic properties. In case of noise caused by construction activities, noise spread pattern from the noise point is used, that can be determined as: $\text{Noise level}_2 - \text{Noise level}_1 = 20 \log r_2/r_1$, meaning that by doubling of distance noise is reduced by 6 dBA.

Table 26: Noise levels

Distance from noise source, m	Calculation level of the noise Average value - dBA	Calculation level of the noise Maximum value - dBA
10	80	90
20	74	84
40	68	78
80	62	72
160	56	66
320	50	60

4.4 Air quality values

The quality indicators of the following components measured in the project area: dust, CO, NO₂ and SO₂.

The results of the accomplished quality measurements given in Annex 1 and Annex 2.

Annex 2 Results of quality measurements in Jvari

Annex 2 Results of quality measurements in Jvari

Place of measurement	Dust Mg/m ³		CO Mg/m ³		No ₂ Mg/m ³		SO ₂ Mg/m ³		Noise db		Radiation mR/h		Vibro-acceleration m/sek	
	standard	result	standard	result	standard	result	standard	result	standard	result	standard	result	standard	result
Toretel street 42°43'26.89"N 42°22'1.84"E	0.5	PM ₁₀ -0.21 PM _{2.5} -0.31	5.0	1.1	0.2	0.02	0.5	≥0.1	70	57.6	30	9	4.0	3.1
Kostava street 42°43'22.89"N 42°22'7.98"E		PM ₁₀ -0.09 PM _{2.5} -0.12		1.2		0.03		≥0.1		61.3		12		2.4
Dzhebadze street 42°43'24.55"N 42°21'4.14"E		PM ₁₀ -0.13 PM _{2.5} -0.24		1.2		0.04		≥0.1		59.3		10		2.4

Zurab Revazishvili
Project Coordinator
Ltd "Eco-Spectri"

Z. Revazishvili



Annex 1: Results of quality measurements in Zugdidi

Annex 1: Results of quality measurements in Zugdidi

Place of measurement	Dust Mg/m ³		CO Mg/m ³		No ₂ Mg/m ³		SO ₂ Mg/m ³		Noise db		Radiation mR/h		Vibro-acceleration m/sek	
	standard	result	standard	result	standard	result	standard	result	standard	result	standard	result	standard	result
Rustaveli street 42°30'23.52"N 41°51'16.18"E	0.5	PM ₁₀ -0.21 PM _{2.5} -0.33	5.0	1.3	0.2	0.02	0.5	≥0.1	70	56.6	30	12	4.0	2.4
Kostava street 42°30'22.36"N 41°52'8.93"E		PM ₁₀ -0.07 PM _{2.5} -0.17		1.7		0.03		≥0.1		60.3		10		2.1

Zurab Revazishvili
Project Coordinator
Ltd "Eco-Spectri"

Z. Revazishvili



Annex 3: Photos

Photo 1: Noise near turn Rustaveli street (Zugdidi)



Photo 2; Dust near the kostava street (Zugdidi)



Photo 3: Dust near turn to Dgebuadze street (Jvari)



Photo 4: Vibration near turn to Tcereteli street (Jvari)



ANNEX B: PROJECT PHOTOS

Zug-01: Network



Zug-01: Ingiri Pumping Station



Zug-01 – Bashi Reservoir



Pot-01: Camp Place



Pot 02: Construction Area






Jvari-01: Network Construction



ANNEX C: NON-COMPLIANCE NOTICES

Zug-01: 28.03.2018 NEWWW

Non-Compliance Notice

Project: Construction Supervision (under USIIP, Tranche 4 Projects), UWSCG/USIIP/QCBS/02-2014	Non-compliance Notice Zugdidi
Contract No:P43405-ICB-ZUG-01	
Contractor: Azinsaati-N	
Reference: Zugdidi, Ingiri Pumping Station, Water Wells2;4.	
<p>This notice is to advise the prime Contractor, on the referenced Contract, of the following notice on health, safety and environmental measures to be implemented urgently.</p>	
<p>GENERAL COMMENT FOR ALL SITES: Site internally should be arranged properly and cleaned regularly. All construction materials and wastes should be properly segregated and stored adequately. Oil spill response kits should be placed at the appropriate locations.</p>	
<p>NON-COMPLIANCE IN ZUGDIDI</p>	
<p>RUKHI CAMP SITE</p> <ul style="list-style-type: none"> - Clean existing Oil spills and prevent spillages in future - Clean all kind of waste daily and store properly under shelters of in the buildings - Spill/Contamination prevention and Vehicle/Heavy equipment inspection refreshment trainings should be carried out for the relevant contractor's staff ASAP - Special training should be provided to the staff regarding Housekeeping at the construction sites and include this issue in daily Toolbox talks. - Drip trays should be provided and used at the vehicle and heavy equipment maintenance area/ Re-fuelling points - Spill Response Equipment should be placed on site; Spill kits should be placed at the vehicle and heavy equipment maintenance area, fuel and lubricant storage and refueling points - All vehicles and heavy equipment should be inspected on daily basis (use relevant checklists), in case of leakage finding, prohibit usage of the damaged Vehicles/Heavy equipment. - Arrange proper vehicle washing facility with polluted water containment, collector and separator. - Observe H&S relevant standards (Open power box and unsafe wiring) 	
<div style="display: flex; justify-content: space-around;">    </div>	
<p>All these conditions have to be remedied within 10 days by the prime Contractor (AZINSAAT-N).</p>	
<p>Date of site visit: 28.03.2018</p>	
<p>Shalva Bosikashvili - Environmental specialist - "SAFEGE"</p>	
<p>Ketevan Chomakhidze - Environmental specialist "UWSCG"</p>	

ANNEX D: IMPLEMENTATION REPORT ON THE ENVIRONMENTAL IMPACT ASSESSMENT

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

Reference	Requirement	Action to date	Action required/comment
Zug-01, Jvari-01			
Zug-01			
Camp Site and Ingiri well field	Clean existing Oil spills and prevent spillages in future	Completed	Contractor improved the situation based on instructions given by SC and UWSCG. Since construction works are almost completed, additional instructions are not provided to the contractor. All improvements are presented in proposed EMR January-June 2018.
	Clean all kind of waste daily and store properly under shelters of in the buildings	Completed	
	Spill/Contamination prevention and Vehicle/Heavy equipment inspection refreshment trainings should be carried out for the relevant contractor's staff ASAP	Completed	
	Special training should be provided to the staff regarding Housekeeping at the construction sites and include this issue in daily Toolbox talks.	Completed	
	Drip trays should be provided and used at the vehicle and heavy equipment maintenance area/ Re-fuelling points	Completed	
	Spill Response Equipment should be placed on site; Spill kits should be placed at the vehicle and heavy equipment maintenance area, fuel and lubricant storage and refueling points	Completed	
	All vehicles and heavy equipment should be inspected on daily basis (use relevant checklists), in case of leakage finding, prohibit usage of the damaged Vehicles/Heavy equipment.	Completed	
Jvari-01			
Network	Surplus soil should be removed to the designated spoil area.	Completed	Contractor is instructed to develop CAP and send improved photos of sites immediately. All improvements will be reflected in the next EMR July-December 2018.
	Entrance to the spoil disposal should be controlled by flagman	Not-completed	
	Use tarpaulins to cover loose material that is transported to and from the site by truck	Not-completed	
	Clean wheels and undercarriage of haul trucks prior to leaving construction	Partially Improved	

Reference	Requirement	Action to date	Action required/comment
	site		
	Spill response equipment must be available at sites	Partially Improved	
	Drip trays should be provided for each equipment (generator, motor pumps, etc)	Not Completed	

ANNEX E: GRIEVANCE REDRESS MECHANISM

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), 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 trained² in USIIP projects, register all relevant grievances with support of an online task management system, which tracks information on the grievance review process and the responsible person. Moreover, the operators fill the ADB complaints log with the registered grievance that coincides with local internal forms. This electronic intranet system 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

The GRC should make a decision within two weeks after the registration of the

² 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.

Environmental Monitoring Checklist/გარემოსდაცვითი მონიტორინგის ჩექლისტი

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

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.

<p>Name of the Contractor and project number/lot</p> <p>მშენებელი კონტრაქტორის სახელი და პროექტის/ლოტის ნომერი</p>	<p>AS Inshaat-N LLC, Construction of Water Supply System in Zugdidi (Zug 01)</p> <p>Contract No:P43405-ICB-Zug-01</p>
<p>Description and Location of the Site</p> <p>სამშენებლო საიტის ადგილმდებარეობის აღწერა</p>	<p>This sub-project is located in Zugdidi, the administrative center of the strategically important Samegrelo-ZemoSvaneti Region, and is located at 318 km west of Tbilisi. Geographically, it is situated at 41°52'14.75" East latitude and 42°30'29.65" North longitude, 100m above the MSL. Regional location of Zugdidi is shown in below.</p> <p>Bashi Reservoir: Bashi reservoir is located north of Zugdidi at an elevation that allows the supply from this reservoir by gravity. It serves as balancing reservoir. The storage volume will be 3 x 3,300 m³. The old reservoir (2 x 10,000 m³) will be demolished and a new reservoir will be constructed at the same site.</p> <p>Ingiri Well Fields: The new well field will comprise 10 wells in Inghiri and construction of the compressor station, located south of Zugdidi. Construction site area is approximately 111 848m². The distance between the wells will be minimum 330 m.</p> <p style="text-align: center;">Zugdidi Site</p>
<p>Implementing Agency/განმახორციელებელი სააგენტო</p>	<p>შპს „საქართველოს გაერთიანებული წყალმომარაგების კომპანია“ “United Water Supply Company of Georgia”, LLC</p>
<p>Date of Visit (Year/Month/Day)/ვიზიტის დრო და თარიღი</p>	<p>05.05.2018</p>
<p>Supervisor's Identity (name, last name, contact information and signature)/საზედამხედველო კომპანიის წარმომდგენლის სახელი, გვარი, საკონტაქტო ინფორმაცია და ხელმოწერა</p> <p>შალვა ბოსიკაშვილი</p> <p>საკონტაქტო ინფორმაცია: 595116041</p>	<p>კონტრაქტორი/Contractor: Signature and stamp/ხელმოწერა და ბეჭედი</p> <p>“As Inshaat - N” LLC Gergia</p> <p>nodari usufaSvili</p>
<p>Current Stage of Civil Works/სამსენებლო სამუშაოების მიმდინარე</p>	<p>მიმდინარე</p>

სტატუსი		<i>On-going</i>			
Weather Conditions/ამინდის პირობები		<i>wvima</i>			
Documents and Facts to be Examined/შესამოწმებელი დოკუმენტები და ფაქტები		Status/სტატუსი			Comment/კომენტარი (Indicate document name, number, date and submit copy of the document, in case of non-existence of the document indicate deadline for preparation and submission of the document) (ჩაწერეთ დოკუმენტის დასახელება, ნომერი, თარიღი და წარმოადგინეთ დოკუმენტის ასლი, დოკუმენტის არ არსებობის შემთხვევაში მიუთითეთ რა ვადა მიეცა კონტარქტორებს დოკუმენტის მომზადებისა და მიღებისათვის)
		Yes/დიახ	Partially/ნაწილობრივ	No/არა	
EMPs/SSEMPs, Protocols and Reports	Contractor's Site-specific Environmental Management Plan (SSEMP) is prepared, reviewed and approved by PIU prior to contractor commencing the works. შემუშავებული და დამტკიცებულია საიტ-სპეციფიკური გარემოსდაცვითი მართვის გეგმა.	დიახ Yes			SSEMP for Construction of Bashi Reservoir, January 2016 SSEMP for Construction of Pumping Station and Well Fields, March 2016 SSEMP for Construction of Jvari Reservoir,

					January 2017
Supervision Consultant has National environmental specialist in staff საზედამხედველო კონსულტანტ კომპანიას დადებული აქვს ხელშეკრულება ადგილობრივ გარემოსდაცვითი საკითხების მართვის სპეციალისტთან	დიახ Yes				
Supervision Consultant has International environmental specialist in staff საზედამხედველო კონსულტანტ კომპანიას დადებული აქვს ხელშეკრულება საერთაშორისო გარემოსდაცვითი საკითხების მართვის სპეციალისტთან			არა No		
Construction contractor has National Environmental Specialist in staff. მშენებელ კონტრაქტორს დადებული აქვს ხელშეკრულება ადგილობრივ გარემოსდაცვითი საკითხების მართვის სპეციალისტთან.	დიახ Yes				
Construction contractor has International Environmental Specialist in staff. მშენებელ კონტრაქტორს დადებული აქვს ხელშეკრულება საერთაშორისო გარემოსდაცვითი საკითხების მართვის სპეციალისტთან.			არა No		
The Construction Contractor engages 1 archeologist for daily supervision (during soil excavation activities). მშენებელ კონტრაქტორს დადებული აქვს ხელშეკრულება არქელოგთან ყოველდღიური ზედამხედველობისთვის მიწის სამუშაოების განხორციელების ეტაპზე.			არა No		
Monthly environmental monitoring reports are prepared by the Contractor and submitted to the Supervision Consultant მომზადებულია გარემოსდაცვითი მართვის გეგმის განხორციელების ყოველთვიური ანგარიშები	დიახ Yes				

კონტრაქტორის მიერ და წარდგენილია კონსულტანტისათვის					
Monthly and/or quarterly environmental monitoring reports are prepared by the Supervision Consultant and submitted to the PIU. მომზადებულია გარემოსდაცვითი მართვის გეგმის განხორციელების ყოველთვიური ანგარიშები კონსულტანტის მიერ და წარდგენილია PIU-სათვის.	დიახ Yes				
Bi-annual EMR(s) submitted to ADB and posted on ADB and PIU websites. ნახევარწლიური გარემოსდაცვითი მონიტორინგის ანგარიში მომზადებულია და გაგზავნილია აგბ-ში და გამოქვეყნებულია აგბ-ს და PIU -ს ვებსაიტზე.	დიახ Yes				
Monitoring reports disclosed to local communities and relevant government agencies. მონიტორინგის ანგარიშები გამოქვეყნებულია ადგილობრივი მაცხოვრებლებისთვის და ადგილობრივი თვითმმართველობებისათვის გასაცნობად.			არა No		
Emergency Response Plan is prepared and approved. შემუშავებული და მიღებულია ავარიულ სიტუაციებზე რეაგირების გეგმა.		დიახ Yes			
Health and Safety Management Plan is prepared and approved. შემუშავებული და მიღებულია ჯანდაცვისა და უსაფრთხოების მართვის გეგმა და ჯანდაცვისა და უსაფრთხოების მართვის სისტემა მშენებლობის ფაზისათვის.	დიახ Yes				ZUG-01-ASIN-HSEP-16-001
Complaints log exists on construction site. საჩივრების ჟურნალი/რეესტრი არსებობს სამშენებლო საიტზე.	დიახ Yes				
Site inspection non-compliance notices issued and corrective action requests implemented. შეუსაბამობების შეტყობინებების მომზადება და წარდგენა კონტრაქტორისთვის და მაკორექტირებელი ქმედებების განხორციელება.	დიახ Yes				

	<p>Training/Capacity building activities undertaken as per EMP requirements and records kept of trainings.</p> <p>გაფორმებული და ხელმოწერილია მუშახელის ტრენინგის ოქმი ჯანდაცვისა და უსაფრთხოების საკითხებზე. ტრენინგის ანგარიშები მომზადებულია და ინახება საიტის კემპზე.</p>	<p>დიახ</p> <p>Yes</p>				
Permits, Licenses, Contracts	<p>The Contractor has a License for extraction of natural resources.</p> <p>კონტრაქტორს გააჩნია სასარგებლო წიაღისეულის მოპოვების ლიცენზია.</p>	<p>დიახ</p> <p>Yes</p>				
	<p>The Contractor has an environmental permit for production of construction materials (cement, asphalt, brick, etc.)</p> <p>კონტრაქტორს გააჩნია სამშენებლო მასალების (ცემენტის, ასფალტის, აგურის და სხვ) წარმოების გარემოზე ზემოქმედების ნებართვა.</p>				N/A	
	<p>The Contractor has a permit or relevant contract from the Municipality for final disposal of construction waste/კონტრაქტორს მიღებული აქვს სამშენებლო ნარჩენების საბოლოო განთავსების ნებართვა ან შესაბამისი კონტრაქტი ადგილობრივ ორგანოებთან.</p>	<p>დიახ</p> <p>Yes</p>				
	<p>The Contractor has a permit for final disposal of municipal waste.</p> <p>კონტრაქტორს მიღებული აქვს საყოფაცხოვრებო ნარჩენების საბოლოო განთავსების ნებართვა.</p>	<p>დიახ</p> <p>Yes</p>				
	<p>The Contractor has executed the contract with the licensed organization on the hand-over and disposal of hazardous waste.</p> <p>კონტრაქტორს გაფორმებული აქვს სახიფათო ნარჩენების გადაცემისა და გატანის ხელშეკრულება ლიცენზირებულ ორგანიზაციასთან.</p>		<p>Partia</p> <p>lly/ნა</p> <p>წილო</p> <p>ბრივ</p>			<p>xelSekruleba</p> <p>SeTanxmehis</p> <p>procesSia da uaxloes</p> <p>droSi mzad iqneba.</p>
	<p>The Contractor has a license for tree felling</p> <p>კონტრაქტორს გააჩნია ლიცენზია ხის ჭრისთვის.</p>		<p>Partia</p> <p>lly/ნა</p> <p>წილო</p> <p>ბრივ</p>			<p>saWIro dikumentacia</p> <p>mzadebis procesSia,</p> <p>romlebic</p> <p>gadaegzavneba</p> <p>garemos ad bunebrivi</p> <p>resursebis dacvis</p>

					saministros.
Performance of Civil Works	<p>The site is fenced and warning signs are arranged. სამშენებლო ობიექტი შემოსაზღვრულია და გამაფრთხილებელი ნიშნები მოწყობილია</p>	<p>დიახ Yes</p>			
	<p>The construction works do not impede pedestrian and motor traffic, or the temporary detour routs are organized. მშენებლობა არ აფერხებს ფეხმავალთა და ტრანსპორტის გადაადგილებას, ან მოვლობილია დროებითი შემოღობვები.</p>	<p>დიახ Yes</p>			
	<p>The working hours are observed in the human settlements and their vicinity. სამუშაო საათები დაცულია დასახლებულ ობიექტებისა და მათი სიახლოვეს.</p>	<p>დიახ Yes</p>			<p>3-4 brigada muSaobs Ramis cvlaSi. სამუშაო საათების რეგულირება ცივ სეზონში დაცულია.</p>
	<p>During the required temporary disruptions of water, power or gas supply, the customers are notified in advance. წყლის, ელექტროენერჯის, ან გაზის მიწოდების დროებითი შეწყვეტისას ხდება მოხმარებელთა წინასწარი გაფრთხილება.</p>	<p>დიახ Yes</p>			
	<p>The construction machinery and equipment is in good order (there is no leakage of fuels and lubricants, nor excess noise and emissions). სამშენებლო მანქანები და ტექნიკა გამართულია (არ ხდება საწვავ-საპოქის ლიქვა, ღარიბი და ხმაური).</p>		<p>Partially/წარმო წილობრივ</p>		<p>დრო და დრო არიან დიზელის საწვავისა და ზეთის დარღვევები. დაბინდებული მიწის დაზიანება და გადაადგილება საფრთხილო ნარჩენების განთავსებისას (ინახება სეზონური კონტეინერები, რომლებიც განთავსებული არიან მანქანებში).</p>
	<p>The construction materials and waste are temporarily stored in the specific place on-site, designated for this purpose. სამშენებლო მასალები დასაწყობებულია</p>	<p>დიახ Yes</p>			

	ობიექტზე გამოყოფილ განსაზღვრულ ადგილას.					
	The construction waste is transported from the site on regular basis, to the officially designated (in writing) site. სამსენბლო ნარცენების ობიექტიდან გათავსდება რეგულარულად, ვერილობით ნებადართულ ადგილას.	დიახ Yes				
	During transportation, the construction materials and waste are placed on the covered hood. ტრანსპორტირებისას სამსენბლო მასალა და ნარცენები ტავსდება გადახურულ ზარაზე.		Partially/ნაწილობრივ			Sekvetilia specialuri gadasaxuri tentebi
	The site is watered during the periods of intensive dust generation and dry weather conditions. სამსენბლო ობიექტი ირწყვება მთვრის ინტენსიური თბობის და მშრალი ამინდის პირობებში.	დიახ Yes				
	The containers for collection of domestic waste are placed in the construction site/camp. სამშენებლო ობიექტზე/ბანაკაში განთავსებულია საყოფაცხოვრებო ნარჩენების შესაგროვებელი კონტეინერები.	დიახ Yes				
	The construction camp is supplied with water and toilets in good sanitary condition. სამშენებლო ბანაკაში მიყვანილია წყალი, მოწყობილია ტუალეტი და დაცულია მისი სანიტარული მდგომარეობა.	დიახ Yes				
	During excavation works, in case of any archeological chance finds, the works are suspended and the employer is notified in written form. მიწის სამუშაოების დროს, თუ არქეოლოგიური აღმოჩენები ხდება, სამუშაოები შეწყვეტება და მფლობელისთვის ვერილობითი ინფორმაცია მიწოდდება.	დიახ Yes				
Monitoring measurements	Monitoring measurement data (air, water, soil, erosion, noise, dust, vibration, etc). წყლის, ჰაერის, ვიბრაციის, ეროზიის, ხმაურის, მტვრის და ნიადაგის მონაცემების გაზომვების მონიტორინგი.			No/არა		ვიბრაციის, ხმაურის და მტვრის მონაცემების გაზომვები ტარდება დაგვიანებით შენიშვნა:

						გაზომვები არ ტარდება სსემპ-ში მოცემული მონიტორინგის გეგმის შესაბამისად.
Top soil protection	<p>Topsoil is stripped and stored according to standard procedures and used further for landscaping and reinstatement.</p> <p>წიადაგის ზედა ფენა სტანდარტული პროცედურების მიხედვით მოჭრილია და დასაწყობებულია, შემდგომში აღდგენითი სამუშაოების წარმოებისთვის.</p>	<p>დიახ Yes</p>				
Pollution Prevention	<p>Pollution prevention and response measures are implemented.</p> <p>dabinZurebis Tavidan acileba.</p>	<p>დიახ Yes</p>				
Prevention of trees	<p>Trees are protected from cutting or unintentional damage. Cutting is performed only in cases of proved necessity and in agreement with municipality.</p> <p>xeebis dacva.</p>	<p>დიახ Yes</p>				
Safety Measures	<p>The workers use all personal safety equipments required for individual technological processes (hard hats, gloves, respirators, glasses, etc.).</p> <p>muSaxeli iyenebs calkeuli teqnologiuri procesebisTvis aucilebel pirad damcav saSualebebs (Cafxutebi, xeITaTmanebi, respiratorebi, saTvaleebi da a.S.).</p>	<p>დიახ Yes</p>				
	<p>The sites are provided with the fire fighting and emergency medical aid kits, site is fenced, site lightning, signs are installed, etc .</p> <p>samSeneblo obieqtze ganTasebulia xanZarsawinaaRmdego da saswrafo samedicino daxmarebis sabaziso nakrebebi. Saiti SemoRobilia, ganaTeba damontaJebulia, sainformacio dafebi/abrebi gakrulia, das xv.</p>	<p>დიახ Yes</p>				

Works' Completion	<p>After completion of main works, the site undergoes final cleanup, harmonization with outward landscape and landscaping.</p> <p>ZiriTad samuSaoTa dasrulebisas warmoebs obieqtis saboloo dasufTaveba, gare landSaftTan harmonizeba da gamwvaneba.</p>		Partially/წილობრივ			<p>შენიშვნა: განხორციელდება სამშენებლო სამუშაოების დასრულების შემდეგ.</p> <p>სამუშაოების დასრულების შემდეგ უნდა ჩატარდეს დასუფტავებითი სამუშაოები</p>
	<p>After completion of the operations in the quarry or its certain section, the idle material is backfilled, compacted, terraced and harmonized with the landscape.</p> <p>karieris an misi calkeuli ubnis eqspluataciis dasrulebisas warmoebs fuWi masalis ukuCayra, kompaqtireba, terasireba, da landSaftTan harmonizeba.</p>				N/A	
	<p>Final Post Construction Environmental Audit/monitoring is conducted and Final Environmental Audit Report is prepared //საბოლოო გარემოსდაცვის მონიტორინგი/აუდიტი ჩატარებულია და საბოლოო გარემოსდაცვის აუდიტის ანგარიში მომზადებული.</p>		დიახ Yes			<p>შენიშვნა: ჩატარდება სამშენებლო სამუშაოების დასრულების შემდეგ</p>

Jvari 01

Environmental Monitoring Checklist	
Name of the Contractor and project number/lot	AS Inshaat-N LLC, Construction of Water Supply System in Zugdidi (Zug 01) Contract No: P43405-DC-JVARI-01
Description and Location of the Site	<p style="text-align: center;">Jvari Site</p> <p>This sub-project is located in Jvari, the administrative center of the strategically important Samegrelo-ZemoSvaneti Region, and is located at 362 km west of Tbilisi (28,639 km from Zugdidi and 17, 657 km from Tsalenjikha). Geographically, it is situated at 42°71'67.51" East latitude and 42°05'27.56" North longitude, 280 m above the MSL. Regional location of Zugdidi is shown in below.</p> <p>Jvari Reservoir: Jvari reservoir is located north of Jvari at an elevation that allows the supply from this reservoir by gravity. It serves as balancing reservoir. Rehabilitation of existing reservoir or construction of new one depending on results of detailed investigation (Capacity - 2 x 1000 m³), area – 1690 m².</p> <p>Jvari Well Field and Compressor Station: The new well field will comprise 7 wells at the entrance to Jvari and construction of the compressor station, located south of Jvari (area – 1150m²). Construction site area is approximately 111 848 m². The distance between the wells will be minimum 330 m.</p>
Implementing Agency	"United Water Supply Company of Georgia", LLC
Date of Visit (Year/Month/Day)	28.05.2018

Supervisor's Identity (name, last name, contact information and signature)	Contractor: Signature and stamp				
	"As Inshaat - N" LLC Gergia Nodar USUPASHVILI 577 687 671				
Current Stage of Civil Works	On-going				
Weather Conditions	Sunny				
Documents and Facts to be Examined	Status				Comment (Indicate document name, number, date and submit copy of the document, in case of non-existence of the document indicate deadline for preparation and submission of the document)
	Yes	Partially	No	N/A	
EMPs/SSEMPs, Protocols and Reports	Contractor's Site-specific Environmental Management Plan (SSEMP) is prepared, reviewed and approved by PIU prior to contractor commencing the works.	Yes			SSEMP – Site Specific Environmental Management Plan. SSEMP for Construction of Jvari Reservoir, January 2017
	Supervision Consultant has National environmental specialist in staff	Yes			

	Supervision Consultant has International environmental specialist in staff			No	
	Construction contractor has National Environmental Specialist in staff.	Yes			
	Construction contractor has International Environmental Specialist in staff.			No	
	The Construction Contractor engages 1 archeologist for daily supervision (during soil excavation activities).			No	
	Monthly environmental monitoring reports are prepared by the Contractor and submitted to the Supervision Consultant	Yes			
	Monthly and/or quarterly environmental monitoring reports are prepared by the Supervision Consultant and submitted to the PIU.	Yes			
	Bi-annual EMR(s) submitted to ADB and posted on ADB and PIU websites.	Yes			
	Monitoring reports disclosed to local communities and relevant government agencies.			No	
	Emergency Response Plan is prepared and approved.		Yes		

	Health and Safety Management Plan is prepared and approved.	Yes			JVARI-01-ASIN-HSEP-17-001
	Complaints log exists on construction site.	Yes			
	Site inspection non-compliance notices issued and corrective action requests implemented.	Yes			
	Training/Capacity building activities undertaken as per EMP requirements and records kept of trainings.	Yes			
Permits, Licenses, Contracts	The Contractor has a License for extraction of natural resources.	Yes			
	The Contractor has an environmental permit for production of construction materials (cement, asphalt, brick, etc.)			N/A	
	The Contractor has a permit or relevant contract from the Municipality for final disposal of construction waste.	Yes			
	The Contractor has a permit for final disposal of municipal waste.	Yes			
	The Contractor has executed the contract with the licensed organization on the hand-over and disposal of hazardous waste.		Partially		The contract is being negotiated; an issue will soon be completed.

	The Contractor has a license for tree felling		Partially			Currently, the CONTRACTOR does not need a license. The CONTRACTOR contacted the National Forestry Agency and the Samegrelo-Zemo Svaneti Forest Service, and, if necessary, the documents will be sent to the National Forestry Agency.
Performance of Civil Works	The site is fenced and warning signs are arranged.	Yes				
	The construction works do not impede pedestrian and motor traffic, or the temporary detour routs are organized.	Yes				
	The working hours are observed in the human settlements and their vicinity.	Yes				
	During the required temporary disruptions of water, power or gas supply, the customers are notified in advance.	Yes				
	The construction machinery and equipment is in good order (there is no leakage of fuels and lubricants, nor excess noise and emissions).	Yes				Time after time are being fixed leakage of fuel, lubricants and oil. Contaminated materials are being immediately removed to the Hazardous Materials Storage area (Hazardous Materials in the HWSA, are kept in special containers which are placed in secondary containment).

	The construction materials and waste are temporarily stored in the specific place on-site, designated for this purpose.	Yes				
	The construction waste is transported from the site on regular basis, to the officially designated (in writing) site.	Yes				
	During transportation, the construction materials and waste are placed on the covered hood.		Partially			Special tarpaulin coverages were requested.
	The site is watered during the periods of intensive dust generation and dry weather conditions.	Yes				
	The containers for collection of domestic waste are placed in the construction site/camp.	Yes				
	The construction camp is supplied with water and toilets in good sanitary condition.	Yes				
	During excavation works, in case of any archeological chance finds, the works are suspended and the employer is notified in written form.	Yes				A similar case has not yet been fixed.
Monitoring measurements	Monitoring measurement data (air, water, soil, erosion, noise, dust, vibration, etc).	Yes				Measurement of environmental components are carried out in accordance with SSEMP.

Top soil protection	Topsoil is stripped and stored according to standard procedures and used further for landscaping and reinstatement.	Yes				
Pollution Prevention	Pollution prevention and response measures are implemented.	Yes				
Prevention of trees	Trees are protected from cutting or unintentional damage. Cutting is performed only in cases of proved necessity and in agreement with municipality.	Yes				
Safety Measures	The workers use all personal safety equipments required for individual technological processes (hard hats, gloves, respirators, glasses, etc.).	Yes				
	The sites are provided with the firefighting and emergency medical aid kits, site is fenced, site lightning, signs are installed, etc .	Yes				
Works' Completion	After completion of main works, the site undergoes final cleanup, harmonization with outward landscape and landscaping.	Yes				Will be commenced after completion the works.
	After completion of the operations in the quarry or its certain section, the idle material is backfilled, compacted, terraced and harmonized with the landscape.				N/A	

	Final Post Construction Environmental Audit/monitoring is conducted and Final Environmental Audit Report is prepared	Yes				Will be commenced after completion of works.
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