Project Number: 43405-028 Reporting Period: July-December 2020

## GEORGIA: URBAN SERVICES IMPROVEMENT INVESTMENT PROGRAM (TRANCHE 6) (FINANCED BY THE ASIAN DEVELOPMENT BANK)

Prepared by:	Ketevan Chomakhidze, Environmental Consultant, "United Water Supply Company of Georgia", Tbilisi, Georgia
For:	The Ministry of Regional Development and Infrastructure of Georgia and the Asian Development Bank
Endorsed by:	Maka Goderdzishvili, Head, Department Environmental Protection and Permits

February 2021

#### 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					
IA	Implementing Agency					
IPMO	Investment Program Management Office					
IEE	Initial Environmental Examination					
MFF	Multi-tranche Financing Facility					
MEPA	Ministry of Environmental Protection and Agriculture					
MoRDI	Ministry of Regional Development & Infrastructure					
NEA	National Environmental Agency					
OJSC	Open Joint Stock Company					
SC	Supervision Consultant					
USIIP	Urban Sector Improvement Investment Program					
UWSCG	United Water Supply Company of Georgia					
WHO	World Health Organization					
WSS	Water Supply & Sewerage					

	INTRODUCTION 4 Preamble	4
1.2 H	leadline Information	4
2. 2.1 P	PROJECT DESCRIPTION AND CURRENT ACTIVITIES 5 Project Description	5
	Project Contracts and Management	
2.3	Project Activities during Current Reporting Period	
2.3	.1 Construction progress under CHI-01 project	. 12
2.4	Description of Any Changes to Project Design	. 16
3. 3.1	Environmental Safeguard activities 17 General Description of Environmental Safeguard Activities	. 17
3.2	Site Audit	. 20
3.3	Issues Tracking (Based on Non-Conformance Notices)	. 32
3.4	Trends	. 33
3.5	Unanticipated Environmental Impacts or Risks	. 33
4. 4.1	Results of environmental monitoring 35 Overview of Monitoring Conducted during Current Period	. 35
4.2	Trends	. 38
4.3	Summary of Monitoring outcomes	. 38
4.4	Material resources Utilization	. 38
4.4	.1 Current Period	. 38
4.4	.2 Cumulative Resources Utilization	. 38
4.5	Waste Management	. 38
4.5	.1 Current Period	. 38
4.5	.2 Cumulative Waste Generation	. 39
4.6	Health and Safety	. 39
4.5	.1 Community Health and Safety	. 39
4.5	.2 Worker Safety and Health	. 39
4.7	Training	. 40
5. 5.1	functioning of the SEMP 41 SEMP Review (prepared and updated under USIIP/T6, including CHI-01, MAR- Mar-02 sub-projects)	
6. 6.1	good practice and opportunity for improvement 42 Good Practice	. 42
6.2	Opportunities for Improvement	. 42
7. 7.1	summary and recommendations 43 Summary	. 43
7.2	Recommendations	. 43

# Contents

## 1. INTRODUCTION

#### 1.1 Preamble

- 1. This report represents the Semi-annual Environmental Monitoring Review (SAEMR) for the Urban Services Improvement Investment Program, Tranche 6 and describes the period of July-December 2020.
- 2. This report is the 7<sup>th</sup> Environmental Monitoring Review (EMR) of USIIP/Tranche 6.

#### **1.2 Headline Information**

**3.** During the reporting period under CHI-01 sub-project: Construction of Water Supply System in Chiatura, some additional areas such as 4 apartment buildings on Sachkhere road, Avarioni and Saphari districts were added to extend coverage of water supply system.

## 2. PROJECT DESCRIPTION AND CURRENT ACTIVITIES

#### 2.1 Project Description

- 4. 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.
- 5. 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.
- 6. Tranche 6 of the Investment Program includes:
  - Construction of Water Supply and Waste Water Systems in Marneuli and Construction of Waste Water System and Collector in Bolnisi (MAR-01);
  - Construction of Waste Water Treatment Plant Construction for Marneuli and Bolnisi in Maneuli (MAR-02);
  - Construction of Water Supply System in Chiatura (CHI-01).

#### The following projects are financed under Tranche 6:

- 7. Construction of Water Supply and Waste Water Systems in Marneuli and Construction of Waste Water System and Collector in Bolnisi (MAR-01): Mar-01 project envisages the rehabilitation and construction of reservoirs with the total capacity of 12,000M<sup>3</sup>=(2X3000+3X2000); construction of cast iron transmission pipeline with the diameter of 700 mm 10 km and 600 mm 4km; construction of network with Polyethylene pipes of OD 50 to OD 500. The project measures for the sewer network comprise the lying about 150 km new gravity pipes (DN 150 to DN 800) and 2.7 km new pressure pipes (OD 110 and OD 225). There will be 9 new wastewater pumping stations; 600mm to 1000 mm diameter inspection wells (concrete or polyethylene) and 400 mm diameter house connections (polyethylene). Proposed project envisages construction of sewerage system in Bolnisi which will work entirely by gravity (DN 200 and DN 250 HDPE pipes) and will be connected at 3 different points to the future DN 500 HDPE interceptor that will convey the collected sewer from Bolnisi to Marneuli WWTP.
- 8. Three separate IEEs were prepared for MAR-01 project: Improvement of Marneuli Water Supply System (August 2016); Improvement of Marneuli Wastewater System (August 2016); Improvement of Bolnisi Wastewater System (August 2016) and further updated and approved in January 2019 due to the finalization of the project design (please see para 3 above).
- **9.** The contract No P43405-ICB-MAR-01 was signed on November 20, 2018 with "Akelik Group OJSC" (Azerbaijan). The date of completion of the contract is March 29, 2021.

- Construction of Waste Water Treatment Plant for the Cities of Marneuli and Bolnisi in Marneuli (MAR-02). The project comprises of the construction of new Wastewater Treatment Plant in Marneuli with the capacity of 9,931 m<sup>3</sup>/day.
- 11. The contract No UWSCG-ICB-MAR-02-2019 was signed in October 18, 2019 with Joint venture of Toshiba Water Solutions Pvt. Ltd and IN-SI LLC (JV partner) (India/Georgia). The contract completion date is April 2021.
- 12. Construction of Water Supply System in Chiatura (CHI-01). The work under the CHI-01 project comprises the rehabilitation and construction of the water supply network, transmission pipeline and Reservoirs. In particular, Chi-01 project consists of the following works: the rehabilitation of the existing WS system by replacing the old pipework, rehabilitation of existing reservoirs and pumping stations; construction of 2 new reservoirs and pump houses; construction of 7 new borewells in Sachkhere and connect these to Bisi reservoir; laying of new transmission mains.
- **13.** The contract No P43405-ICB-CHI-01 was signed on August 21, 2017 with "Akkord Industry Construction Investment Corporation" OJSC" (Azerbaijan), the initial completion date on April 15, 2019 was extended twice, for the first time until 30 June, 2020, and then until 8 February 2021.

#### 2.2 Project Contracts and Management

- 14. The main institutions that are involved in implementation of the EMP are UWSCG executing agency (EA), Supervision Consultant (SC) the Contractor and to a lesser extent the Ministry of Environment and Natural Resources Protection (MoENRP).
- **15.** Investment Program Management Office (IPMO) established within UWSCG is responsible for the day to day management of the project including implementation of the EMP. The IPMO have an Environmental Specialist who is responsible for management of the environmental aspects of USIIP.
  - **16.** The IPMO (Environmental Specialist) responsibilities in respect of implementation of the EMP are as follows:
    - (i) Approve the Site Specific Environmental Management Plan (SSEMP) before Contractor takes possession of construction site;
    - (ii) Monitor implementation of EMP and ensure the environmental safeguards compliance;
    - (iii) Review the updated IEE and/or SEMP and send it for clearance to ADB;
    - (iv) Ensure that contractors have access to the EMP and IEE report;
    - Finalize SAEMRs (and Final EMRs upon project completion), send it to ADB and address potential ADB's comments until SAEMR disclosure; Provide ENG and GEO final versions of SAEMRs to be uploaded on UWSCG website;
    - (vi) Review and approve the Corrective Action Plan and provide to ADB for review and comments if any;
    - (vii) Participate in public consultations during project implementation;
    - (viii) In case of need assist IPMO Social/Resettlement Consultant in resolving process of environmental safeguards related complaints;
    - (ix) Assist in organizing trainings for the Contractors in coordination with ADB/RETA consultant;
    - (x) Participate in external trainings in environmental management and environmental auditing
  - **17.** The SC include a full time Environmental Specialist to assist the IPMO supervise and monitor implementation of the EMP during construction.
  - 18. The Contractor also appoint a full time Environmental specialist to be a senior member of the construction management team based on site for the duration of the contract. The ES shall have a university degree (preferably at Masters level) in Environmental Science or related discipline and have at least 10 years work experience in environmental management of infrastructure project.
  - 19. Department of Environmental Protection and Permits of UWSCG work together with IPMO on addressing the Environmental Safeguard issues of USIIP sub-projects. More detailed description of implementation arrangements; responsibilities and staffing are provided in the Table 1 below.

#	Millstones/Actions	Contractor (Environmental Specialist)	Construction Supervision Consultant (Environmental Specialist)	IPMO (Environmental Specialist)	Environmental Protection and Permits Department (Environmental Specialist)
1	Environmental planning and management Contractors Environmental Management Plan (site-specific EMP)	Prepare Specific EMP (SEMP) with supplemented Topic Specific EMPs at pre- construction stage based on IEE/EMP Implement SEMP approved by IPMO.	Review and endorse the SEMP; Monitor implementation of SEMP on daily basis; Monitor monthly environmental monitoring reports or results prepared by the Contractor and report to IPMO.	Review and approve the SEMPs; Monitor implementation of EMP and ensure the environmental safeguards compliance.	Work together with IPMO on addressing the environmental non- compliance issues, if any.
2	Changes in design	Provide details of design changes to CSC required to update IEE/EIA, or SEMP; Implement updated SEMP.	Approve the design change to be submitted to IPMO; Make environmental assessment of the change and update the IEE and/or SEMP.	Review the updated IEE and/or SEMP and send it for clearance to ADB	Liaise with CSC in preparing updated IEE and/or SEMP; Upload the approved IEE/SEMP provided by IPMO to UWSCG website for Public Disclosure.
3	Unanticipated impacts	Inform CSC about unanticipated impact and follow the instructions received from IPMO.	Make environmental assessment of the unanticipated impact and update the IEE and/or SEMP	Review the updated IEE and/or SEMP and send it for clearance to ADB	Liaise with CSC in preparing updated IEE and/or SEMP

# Table 1: Institutionnel Arrangement, Responsabilités and Staffing

#	Millstones/Actions	Contractor (Environmental Specialist)	Construction Supervision Consultant (Environmental Specialist)	IPMO (Environmental Specialist)	Environmental Protection and Permits Department (Environmental Specialist)
4	Reporting	Prepare monthly environmental monitoring reports and send it to CSC and IPMO	<ol> <li>Prepare inputs to environmental part of quarterly construction progress reports;</li> <li>Prepare inputs to semi-annual environmental monitoring report (SAEMR) to be submitted to IPMO for further review, comments and improvement.</li> <li>Conduct Post-Construction Final Environmental Audit and prepare final environmental audit report.</li> </ol>	<ol> <li>Finalize SAEMRs (and Final EMRs upon project completion), send it to ADB and address potential ADB's comments until SAEMR disclosure;</li> <li>Provide ENG and GEO final versions of SAEMRs to be uploaded on UWSCG website.</li> </ol>	Upload the approved reports (ENG and GEO) provided by IPMO to UWSCG website for Public Disclosure
5	Permits and clearances	NA	NA	NA	Obtaining environmental permits and clearances
6	Non-compliances	Prepare a corrective action plan (CAP)	Assist contractor in preparing the CAP.	Review and approve the CAP and provide to ADB for review and comments if any.	
7	Public consultations	Participate in public consultations during project implementation	Organize public consultations: inform people about activities and prepare the record of consultations.	Participate in public consultations during project implementation	UWSCG & IPMO host PCs, CSC will present the topics related to environmental issues

#	Millstones/Actions	Contractor (Environmental Specialist)	Construction Supervision Consultant (Environmental Specialist)	IPMO (Environmental Specialist)	Environmental Protection and Permits Department (Environmental Specialist)
8	Grievance Redress Mechanism	Project site Focal person to record environmental grievances in the logbook and follow up with UWSCG established practice for grievance redress	<ol> <li>Ensure that grievances, if any, are being properly documented and addressed timely and effectively.</li> <li>Assist IPMO to develop consolidated GRM database and consolidation of GRM cases both for ENV and Social safeguards</li> </ol>	In case of need assist IPMO Social/Resettlement Consultant in resolving process of environmental safeguards related complaints; Assist IPMO Social/Resettlement Consultant in GRM database consolidation and data analysis.	UWSCG maintains GRM applicable to all projects. UWSCG will ensure IPMO information on grievances is consolidated into the UWSCG grievances (both - environmental and social) without duplication.
9	Trainings	Attend on-site trainings organized by IPMO and ADB/RETA Consultant	Assist the IPMO in organization of trainings for the Contractors on environmental safeguards requirements.	Organize trainings for the Contractors in coordination with ADB/RETA consultant. Participate in external trainings in environmental management and environmental auditing	Participate in external trainings in environmental management and environmental auditing

**20.** Main organizations involved in the project and related to environmental safeguard are presented in the Table 2 below:

project particip	Agency/Comp		Name and contact details	
ant	any			
Lender	Asian	Country Environmental	Ninette R. Pajarillaga	
	Development Bank	Focal	E-mail: npajarillaga@adb.org	
		Associate Safeguards	Nino Nadashvili	
		Officer Georgia Resident	Tel: +995 595 070442	
		Mission Asian Development Bank	nnadashvili@adb.org	
		ADB RETA International	Keti Dgebuadze	
		Environmental Consultant	Tel: +995 577232937	
		Constituti	ketdgeb@yahoo.com	
Borrower	UWSCG	UWSCG, Department of Environmental Protection and Permits, Head	Ms. Maka Goderdzishvili	
			Tel: +995 599 229925	
			E-mail:	
			m.goderdzishvili@water.gov.ge	
		UWSCG/IPMO	Ms. Ana Onashvili	
		Department of Projects Management, Head	Tel: +995 599 692090	
			E-mail:	
			ana.onashvili@water.gov.ge	
Borrower	UWSCG/USIIP/	Environmental Specialist	Ms. Ketevan Chomakhidze	
	Т6		Tel: +995 577 380309	
			E-mail:	
			Chomakhidzek@yahoo.com	
Supervisi .	Supervision	Environmental Specialist	Mr. Rezo Enukidze	
on Consulta	Consultant: Hill International		Tel:	
nt	N.V.		+995 599 164 469	
	(Netherlands)		E-mail:	
			. <u>r.enukidze@gmail.com</u>	

## Table 2: List of Main Organizations under USIIP/T6

Type of project particip ant	Name of Agency/Comp any	Environmental Staff	Name and contact details	
Contract	"Akkord	EH&S Specialist	Environmental Specialist of CC:	
or CHI-01	Industry Construction		Name:	
	Investment		Mr. Teodor Kalmakhelidze	
	Corporation" OJSC		Tel:	
	(Azerbaijan)		+995 598 977 977	
			E-mail:	
			kalmakhelidzetedore@gmail.com	
Contract	Akelik Group	Environmental Specialist	Mr. Paata Chankotadze	
or	OJSC		Tel:	
MAR-01	(Azerbaijan )		+995 599 181753	
			E-mail:	
			paatachank@yahoo.com	
		<sup>1</sup> H&S Specialist	<sup>1</sup> H&S Specialist	Mr. Vakhtang Burchuladze
			Tel:	
			+995 577477432	
			E-mail:	
			v.burchuladze@akelik.ge	
		HSE Manager	Mr. Natig Aliev	
			E-mail: aliyevnatig@mail.ru	
			Mob: +995 593 60 44 48	
		HSE Engineer	Mr. Zaur Askerov	
			E-mail: askerovzaur43@gamil.com	
			Mob: +995 593 39 00 29	

#### 2.3 Project Activities during Current Reporting Period

#### 2.3.1 Construction progress under CHI-01 project

**21.** As it was already mentioned in para 13 above the Date of Signature of Works Contract under Chiatura Water Supply Project (CHI-01 sub-project) was 21 August 2017. The completion day of contract was 15 April 2019.

<sup>&</sup>lt;sup>1</sup> Until 1 November 2020, Mr.Vakhtang Burchuladze was responsible for EH&S Issues under MAR-01. SC requested contractor to hire separate expert for Environmental issues. As a result, Mr.Paata Chakotadze, who was hired by contractor to carry out environmental quality measurements of noise and air pollution was appointed as an Environmental specialist.

- 22. The completion period was extended for section 1 of Chiatura water supply project to 30 June 2020. Section 1 comprised main works as per initial contract. The section 1 works are completed on 30 June and are under operation and maintenance & under defect notification period (DNP). Defect Notification period will end on 30 June 2021 for section 1 works. The section 2 additional works assigned to contractor partly in June 2020 (to connect 4 apartments on Sachkhere road) and partly in October 2020 (to connect Avarioni and Saphari districts of Chiatura). The work of connection to 4 apartments has completed on 12 August 2020 and are under operation at present. The other part of works under section 2 comprising Avarioni & Saphari districts are under construction and scheduled completion period is 8 February 2021.
- **23.** The overall progress of the works at the end of the reporting period is 100% for section 1 and about 50% for Avarioni/Saphari works of the CHI-01 project. More detailed information about the construction work performed during the COVID-19 pandemic for the July-December 2020 reporting period under the project CHI-01 is presented in Table 3 below.

Pipeline	Unit	Progress
Main Transmission Line	m	100.00%
Distribution Network	m	100.00%
DN355 Bisi-CPS Transmission	m	100.00%
DN160 CPS-Lezhubani	m	100.00%
DN160 CPS-Perevisi	m	100.00%
DN225 CPS-Rustaveli	m	100.00%
DN225 Lezhubani Res to PS	m	100.00%
Q200 ST Lezhubani PS - Memorial Res	m	100.00%
Q100 ST Perevisi PS - Tekhisa Res	m	100.00%
DN160 Memorial-Navardzeti	m	100.00%
Giorgadze area	m	100.00%
Total Laid Pipe	m	100.00%
House Connection	n	100%
Crossings	n	100%
Hydraulic Chambers	m <sup>3</sup>	100%
Hydrants	n	100%
Reinstatement of Asphalt	m <sup>2</sup>	100%
Reinstatement of Concrete Pavement	m <sup>2</sup>	100%
Progress on Section 2: Avarioni and Sa	afari Districts, July	/-December 2020
Pipeline laid	m	57.00%
Avarioni Reservoir	n	10%
House Connection	n	70%

#### Table 3: Construction progress under CHI-01 project, July-December 2020

- 24. Physical Progress of Structures under MAR-01 sub-project: Construction of Water Supply and Waste Water Systems in Marneuli and Construction of Waste Water System and Collector in Bolnisi are as follows:
  - Jandari Reservoir: Roof slab of the reservoir completed.

- Kolagiri Pumping Station: Concrete works & masonry works of PS is completed. Electrical/operation room foundation & vertical walls completed. Steel roof truss fabrication completed & erected.
- City Reservoir: foundation raft work has been completed.

**25.** The pipelines laid in July-December 2020 are presented in the table below:

#	Description	Unit	Contract	Previou s cumulati ve	July- December, 2020	%
1	PE pipe OD 50 SDR11	m	3,142.00	716.89	216.8	25.50%
2	PE pipe OD 63 SDR11	m	21,415.00	7,547.87	693.48	35.25%
3	PE pipe OD 75 SDR11	m	33,043.00	12,328.69	4,323.65	39.03%
4	PE pipe OD 90 SDR11	m	9,962.00	3,559.18	1199.4	37.99%
5	PE pipe OD 110 SDR11	m	96,357.00	55,275.74	14,994.92	58.38%
6	PE pipe OD 125 SDR11	m	3,689.00	2,813.60	1,809.16	76.27%
7	PE pipe OD 140 SDR11	m	877.00	331.02	206.38	37.74%
8	PE pipe OD 160 SDR11	m	2,550.00	1,552.74	1043.89	60.89%
9	PE pipe OD 180 SDR11	m	2,168.00	794.78	628.23	36.66%
10	PE pipe OD 200 SDR11	m	1,920.00	1,314.08	22.09	68.44%
11	PE pipe OD 225 SDR11	m	981.00	634.90	-	64.72%
12	PE pipe OD 250 SDR11	m	7,984.00	4,405.57	412.4	55.18%
13	PE pipe OD 280 SDR11	m	292.00	207.37	-	71.02%
14	PE pipe OD 315 SDR11	m	4,177.00	12,328.69	3,696.34	88.49%
15	PE pipe OD 355 SDR11	m	284.00	3,559.18	5,054.10	99.81%
16	PE pipe OD 500 SDR11	m	2,714.00	55,275.74	3,419.13	93.99%

 Table 4: Water Supply Pipelines laid in July 2020 and total laid

26. The sewer lines laid in July-December 2020 are presented in the table below:

#	Description	Unit	Contrac t	ous cumu lative	July- December, 2020	%
1	Corrugated HDPE-pipes DN 150ring stiffness 8 KN/m <sup>2</sup> ,	m	23,494.00	3,164.88	2,148.81	13.47%
2	Corrugated HDPE-pipes DN 200 ring stiffness 8 KN/m <sup>2</sup> ,	m	111,715.00	41,431.05	22,428.42	40.44%
3	Corrugated HDPE-pipes DN 300 ring stiffness 8 KN/m <sup>2</sup>	m	6,771.00	7,518.50	777.6	100%
4	Corrugated HDPE-pipes DN 400ring stiffness 8 KN/m <sup>2</sup> ,	m	2,313.00	2,705.22	392.22	100%
5	Corrugated HDPE-pipes DN 500ring stiffness 8 KN/m <sup>2</sup> ,	m	457.00	1,596.64	1416.33	100%
6	Corrugated HDPE-pipes DN 600ring stiffness 8 KN/m <sup>2</sup> ,	m	5,125.00	0	-	0.00%
7	Corrugated HDPE-pipes DN 800ring stiffness 8 KN/m <sup>2</sup> ,	m	637.00	0	-	0.00%

**27.** The cumulative physical progress of structures under MAR-01 sub-project during the COVID-19 pandemic for the July-December 2020 reporting period s presented in the Table 6 below.

 Table 6: Construction progress under MAR-01 project, July-December 2020

Structure	Civil	Mechanical	Electrical	Instrumentati on
Jandhari Reservoir	82%	5%	0	0
Kolagiri Pumping Station	82%	3%	0	0
City Reservoir	10%	0	0	0

**28.** Cumulative physical progress of water supply and sewer pipes under MAR-01 subproject are presented in the Table 7 below.

Particulars	Water Supply	y Pipes	Sewer Pipes		
	laid	%	Laid	%	
Marneuli	100,398.76	52.41%	56,416.29	38.57%	
Bolnisi	0	0.00%	7,907.53	12.94%	
Interceptor	0	0.00%	8,195.74	37.25%%	
Total	100,398.76	100,398.76	100,398.76	100,398.76	

29. No civil works has been started under MAR-02 sub-project: Construction of WWTP in Maneuli as yet. Initial phase is for mobilization and finalization of design. Under mobilization the contractor is establishing engineer's site office, conducted soil investigations, taking water supply & power connection, completed electrical & instrumentation general arrangement work drawings.

#### 2.4 Description of Any Changes to Project Design

- **30.** As it was already mentioned in paragraph 3 above, during the reporting period some design changes took place under CHI-01 of USIIP/T6 in order to extend coverage of water supply system. These changes included connection of Avarioni and Saphari districts of the City to the WS System. Due to the changes to project SEMP was updated by contractor, endorsed by SC and approved by UWSCG and reviewed and commented by ADB in August b2020.
- **31.** During the reporting period no changes took place to the Construction methodology.

## 3. ENVIRONMENTAL SAFEGUARD ACTIVITIES

#### 3.1 General Description of Environmental Safeguard Activities

- **32.** Individual and joint on-site monitoring activities were conducted by Environmental Monitoring Specialist of SC, Mr. Rezo Enukidze and Environmental Specialist of USIIP Ms. Ketevan Chomakhidze.
- **33.** Due to the fact that The World Health Organization (WHO) on March 11, 2020, has declared the novel coronavirus (COVID-19) outbreak a global pandemic the Government of Georgia and its Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs of Georgia, issued the General Guidelines Related to Infection (COVID-19) which applies to all sectors of economic activity.
- **34.** The General Guideline for COVID-19 was also developed by the Government of Georgia specifically for the construction sector (Please see Annex D) as well.
- **35.** This Guidance for Construction Activities during the COVID-19 was created to provide owners/operators of construction projects and their employees and contractors with precautions to help protect against the spread of COVID-19 as indoor and outdoor construction sites.
- **36.** Based on the above mentioned guideline for the construction sector, the construction staff in addition to other requirements should not appear in the workplace if they:
  - Left the affected country over the past 14 days;
  - Were in close contact with infected person/persons for the past 14 days (they must be self- isolated/quarantined as per the rule);
  - Have symptoms of respiratory infection (coughing, temperature, sneezing, difficulty in breathing, general weakness etc.);
  - Are among the ones who have high risk of getting infected with COVID-19 or serious complications: over 70 years of age, people suffering from chronicle diseases (cardio-vascular diseases, diabetes, bronchial asthma and other respiratory diseases.
- 37. An emergency response plan was developed by SC for preventions of employees' workers against the COVID-19 as well. All EH&S documents, including Health and Safety Plans, as well Site-Specific Environmental Management Plans were updated by contractors.
- **38.** During the reporting period, construction work under T6 was carried out within the framework of the CHI-01 and MAR-01 sub-projects and therefore in this Semi-annual EMR these two sub-projects are reported.
- **39.** Construction activities under MAR-02 will be started when the final design is prepared and submitted by contractor to SC and UWSCG and finally agreed with ADB.
- **40.** The monitoring activities under CHI-01 and MAR-01 sub-projects included:
  - The monitoring of compliance of construction activities under CHI-01 project sites to the IEE/EMP requirements;

- The monitoring of compliance of construction activities under MAR-01 project sites to the IEE/EMP requirements;
- **41.** During the reporting period Environmental Specialist of CHI-01 sub-project, Mr.Teodor Kalmakhelidze, conducted daily monitoring of construction sites and developed monthly monitoring reports and represented in SC / Hill.
- 42. Environmental, H&S Specialist, Mr. Vakhtang Burchuladze hired by Contractor under the MAR-01 sub-project conducted the day-to-day monitoring of the construction sites until the November 1 2020. After 15 December 2020 a new environmental specialist Mr. Paata Chankotadze continued day-to-day monitoring of sites and developing of monthly environmental monitoring reports to SC / Hill.
- 43. Environmental Monitoring Specialist, Ms. Rezo Enukidze hired by Supervision Company under USIIP/T6 developed quarterly monitoring reports for UWSCG/USIIP based on the monthly reports submitted by Contractor, and environmental monitoring of construction sites.
- 44. Environmental Specialist of UWSCG/USIIP, Ms. Ketevan Chomakhidze performed monitoring of contractor's performance with the approved EMPs and SSEMPs, environmental standards and other environmental commitments of the contractor. ES developed Semi-annual Environmental Monitoring Reports (SAEMR) and submitted to ADB based on the quarterly reports prepared by SC and monitoring results of construction sites.
- **45.** The construction activities affecting the environment during the reporting period are as follows:
  - Excavation works
  - Removal of Surplus Soil
  - Backfilling of Trenches
- **46.** 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. The monitoring guidelines were set as shown in the Table 8 below.

Parameters	Frequency & Location	Remarks
	CHI-01	
Air Quality	Quarterly. Reservoirs, Networks, Transmission Main	Watering site during excavation works to avoid dust spreading Conduct measurements of
		Dusts Mg/m3; CO Mg/m3; NO2 Mg/m3; SO2 Mg/m3
Noise	Quarterly. Reservoirs, Networks, Transmission Main	Ensure that all equipment & vehicles used for construction activity are in good condition
		Limiting working hours to 8 am – 6 pm

#### **Table 8: Parametric Measurement Guidelines**

Parameters	Frequency & Location	Remarks
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
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.
	MAR-01	
Air Quality	Quarterly Reservoirs, Networks, Transmission Main	Watering site during excavation works to avoid dust spreading Conduct measurements of Dusts Mg/m3; CO Mg/m3; NO2 Mg/m3; SO2 Mg/m3
Noise	Quarterly Reservoirs, 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
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.

**47.** 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.

#### 3.2 Site inspections/Audit

**48.** Inspection and monitoring of construction sites under CHI-01 and MAR-01 sub-project were conducted by ESs of USIIP and SC/HILL taking into account all restrictions and regulations described in 31-36 paragraphs above. The schedule of Joint inspection and summary of audits carried out under sub-projects are provided in the Table 9. It should be noted also that the majority of non-compliances are improved by contractor during the reporting period, issues pending and need further improvement is presented in the table 18 below.

Date of Visit	Name of Company Name of Contract	Auditors Name	Purpose of audit	Summary of any Significant Findings	Implemente d Actions	Implementat ion Status
Continuously during reporting period (July- December 2020)	"Akkord Industry Construction Investment Corporation" OJSC CHI-01	Environmental, H&S Specialist of Contractor Mr. Teodor Kalmakhelidze	Day to day monitoring of sites Compliance with Environmental and HES requirements	Environmental, Health and safety issues on construction sites	Prepare Monthly Environmen tal Monitoring Reports and send to SC	Completed
		Environmental Specialist of Supervision Company HILL Mr. Rezo Enukidze	Compliance with Environmental safeguard requirements	Environmental issues on construction sites	Prepare Quarterly Environmen tal Monitoring Reports and send to UWSCG Issue non- compliance if necessary	Completed

## Table 9. Summary of site audits for CHI-01 or MAR-01 sub-projects.

Date of Visit	Name of	Auditors	Purpose of	Summary of any	Implemente	Implementat
	Company	Name	audit	Significant	d Actions	ion Status
	Name of			Findings		
	Contract					
9 October 2020		Environmental Specialist of Supervision Consultant HILL Mr.Rezo Enukidze	Regular Monitoring of sites	Reinstatement by asphalt layer of tranches within Chiatura network as far as possible as these present driving hazard and community annoyance, (please see photo below)	Verbal Instruction were given to contractor to improve the situation by the end of 20 <sup>th</sup> October 2020	Completed
				Photo-01) Proper warning and information signs should be arranged at the entrance of the site (Please see Annex B, Photo- 02) All construction material should		Completed
				be properly segregated and stored adequately in proper waste (Hazardous Household) containers with		Completed

Date of Visit	Name of	Auditors	Purpose of	Summary of any		Implementat
	Company	Name	audit	Significant Findings	d Actions	ion Status
	Name of Contract					
	Contract			roof & should be		
				installed at the		Completed
				storage area, waste should be		
				placed only at the		
				proper waste container, please		
				see photo below		
				and in Annex B.		
				-		
				Contraction of the		
				R. A.		
				All types of waste		
				should be		Completed
				removed from the territory timely		
				and fully.		
				Proper fuel/oil		
				spill response		Completed
				items (sand, sawdust, special		
				containers)		
				should be available at the		
				site, please see		
				photo below.		

Date of Visit	Name of Company	Auditors Name	Purpose of audit	Summary of any Significant	Implemente d Actions	Implementat ion Status
	Name of Contract			Findings		
				All spots of oil spills should be corrected immediately.		Completed
				Containers with fuel/lubricant should be managed properly (stored at the proper organized place with concrete floor and roofing) to avoid leakage and ground contamination		Completed
				Equipment & vehicles used for construction activities should be in good condition (no leakage) (Please see Annex B, photo- 06)		Completed
				Storage territory internally should be arranged properly and cleaned regularly. (Please see Annex B, photo-		Was not completed at the end of the reporting period December 31, 2020, deadline for

Date of Visit	Name of	Auditors	Purpose of	Summary of any		Implementat
	Company	Name	audit	Significant Findings	d Actions	ion Status
	Name of Contract					
	Contract			03)		improvement was given mid of the January 2021 Please see para 51,52 below.
				The camp yard should be covered with gravel, please see photo documentation below		Was not completed at the end of the reporting period December 31, 2020, deadline for improvement was given mid of the January 2021 Please see para 51, 52 below.
				Annex B, photo- 04 and-05)		
15 December 2020		Environmental Specialist of SC Mr. Rezo Enukidze Environmental,	Monthly monitoring of sites	CC to sign agreement with licensed company for disposal of hazardous waste.	Verbal instruction was given to contractor to improve the situation by	Completed
		H&S Specialist of Contractor Mr. Teodor Kalmakhelidze Environmental Specialist of USIIP Ms. Ketevan Chomakhidze		CC to perform the next parametric measurements of air, noise, vibration, water on a quarterly basis according to IEE/EMP and ADB requirements Q1/2021.	2021.	Will be completed and reflected in the next reporting period, January-June 2021, Please see para 51,52 below.

Date of Visit	Name of	Auditors	Purpose of	Summary of any	Implemente	Implementat
	Company	Name	audit	Significant Findings	d Actions	ion Status
	Name of			Findings		
	Contract					
				CC H&S officer to updated logbook for fixing accidents and near misses and kept at camp site.		Was not completed at the end of the reporting period December 31, 2020, deadline for improvement was given mid of the January 2021 Please see para 51, 52 below.
				GRM logbook to be prepared and kept at camp site.		Please see comment above
Continuously during reporting period (July- December 2020)	"Akelik Group OJSC" (Azerbaijan) MAR-01	Environmental, H&S Specialist of Contractor Mr. Vakhtang Burchuladze	Day to day monitoring of sites Compliance with Environmental and HES requirements	Safety issues on construction sites, Workers always should use complete PPE	Prepare Monthly Environmen tal Monitoring Reports and send to SC	Completed
		Environmental Specialist of Supervision Company HILL Mr. Rezo Enukidze	Compliance with Environmental and HES requirements	Poor Housekeeping	Prepare Quarterly Environmen tal Monitoring Reports and send to UWSCG Issue non- compliance if necessary	Completed
27 July 2020	-	Environmental Specialist of USIIP	Monthly monitoring of sites	Proper warning and information signs should be	If necessary Verbal instruction was given to	Completed

Date of Visit	Name of Company Name of	Auditors Name	Purpose of audit	Summary of any Significant Findings	Implemente d Actions	Implementat ion Status
	Contract	Ms. Ketevan Chomakhidze Environmental Specialist of Supervision Consultant HILL Mr.Rezo Enukidze		arranged at the entrance and perimeter of the site, Please see photo below. Soil (surplus/accumul ated soil) for backfilling purposes should be managed/stored properly on the territory primarily agreed with the Municipality Construction waste should be timely removed from the construction site and disposed properly.	contractor to immediate improve the situation by the 5 <sup>th</sup> of August 2020	Completed

Date of Visit	Name of	Auditors	Purpose of	Summary of any	Implemente	Implementat
	Company	Name	audit	Significant	d Actions	ion Status
				Findings		
	Name of					
	Contract					
18.11.2020		Environmental, H&S Specialist	Regular Environmental	Contractor has to	Verbal	Was not completed at
		of Contractor	monitoring of	submit for approval license,	instruction was given to	the end of
		Mr. Vakhtang	sites	working plan and	contractor to	the reporting
		Burchuladze		reinstatement	immediately	period December
				plan for quarry, all	improve the	31, 2020,
		Environmental		this documents	situation.	deadline for
		Specialist of		are the part of the		improvement
		Supervision		state		was given mid of the
		Consultant HILL		requirements.	Non-	January 2021
		Mr.Rezo			Compliance Notice was	Please see
		Enukidze			issued and	para 54-56 below.
					is presented	Delow.
					in Annex C of this	
					report.	
				Top Soil must be prevented from	•	Completed
				damage. Topsoil	(Photo-	
				had to be stripped	documentati	
				and placed safely	ons are	
				for future	presented in	
				reinstatement	Annex C,	
				works.	non-	
				Environmental	compliance	
				Representative is	note, 19	Completed
				not nominated	November 2020)	Completed
				and thus	2020)	
				unprofessional		
				performance is in		
				place.		
				Note: Mr. Paata		
				Chakotadze was		
				nominated as an		
				environmental		
				representative of contractor.		
				Document		
				regarding quarry are not provided.		
						Completed
19.11.2020		Environmental,	Regular	Post construction	Verbal	Completed
		H&S Specialist	Environmental	site is not	instruction	

Date of Visit	Name of	Auditors	Purpose of	Summary of any		Implementat
	Company	Name	audit	Significant	d Actions	ion Status
	Name of			Findings		
	Contract					
		of Contractor	monitoring of	repaired to the	was given to	
		Mr. Vakhtang	sites	condition required	contractor to	
		Burchuladze		by Project	immediately	
				standards. One of	improve the	
				central streets is	situation.	
		Environmental Specialist of		damaged to that		
		Supervision		extent that is	Non-	
		Consultant		creating problems	Compliance	
		HILL		to local	Notice was issued and	
		Mr.Rezo Enukidze		community.	is presented	
				Condition of the	in Annex C	
				road in the dry	of this	
				weather is a	report.	
				source of dust		
				and during the	(Photo-	
				rains source of	documentati	Completed
				mud. At the same time holes exiting	ons are	
				on the road	presented in	
				forcing drivers to	Annex C, non-	
				drive unstable	compliance	
				and this causes	note, 19	
				additional air	November	
				pollution from	2020)	
				fuel.		
				(Please see		
				Annex B, Photo-		
				16)		
				Ostatu		
				Safety signs are not placed to		
				not placed to warn population		
				that this part of		
				the road in		
				damaged and		Completed
				drivers have to be		
				very careful.		
				Relevant traffic		
				signs and		
				flagmen should		
				control traffic movement		
				properly.		
				P. 0P01131		

Date of Visit	Name of	Auditors	Purpose of	Summary of any	Implemente	Implementat
J	Company	Name	audit	Significant	d Actions	ion Status
	Name of			Findings		
	Contract					
				(Please see		
				Annex B, Photo-		
				08, Photo-09)		
				Training records		
				are not available;		
				<b>Environmentel</b>		Completed
				Environmental representative is		
				not nominated.		
						Completed
19.11.2020		Environmental,	Regular	Waste	Verbal	Completed
		H&S Specialist	Environmental	Management	instruction	
		of Contractor	monitoring of sites	Plan is not	was given to	
		Mr. Vakhtang	Siles	Submitted.	contractor to	
		Burchuladze			immediately improve the	
					situation	
		Environmental Specialist of			ondation	
		Supervision		Site is not	Non-	Was not
		Consultant		arranged properly	Compliance	completed at the end of
		HILL Mr.Rezo		and cleaned	Notice was	the reporting
		Enukidze		regularly. At all locations are	issued and is presented	period
				cigarette butts.	in Annex C	December 31, 2020,
					of this report	deadline for
				All construction		improvement was given
				materials and wastes should be	(Photo-	was given mid of the
				properly	documentati ons are	Please see
				segregated and	presented in	para 54-56 below.
				stored adequately	Annex C,	January 2021
				Oil spill response	non-	
				kits are not in	compliance	
				place although	note, 19 November	Completed
				engineer has	2020)	Completed
				advised many	,	
				times to deploy equipment at		
				appropriate		
				locations.		
				All equipment		
				must be checked		
				against lubricant		

Date of Visit	Name of	Auditors	Purpose of	Summary of any	Implemente	Implementat
	Company	Name	audit	Significant	d Actions	ion Status
	Name of			Findings		
	Contract					
				and fuel leaking,		Completed
				because many of		
				equipment are		
				spilling or are under repairmen		
				in are which is not		
				allocated for this		
				activities.		
				Refuelling station		
				and trucks should		
				be equipped with		
				the spill kit and		Completed
				fire relevant fighting		
				equipment; drip		
				tray should be		
				used for fuel		
				spillage		
				prevention.		
				Top soil is not		
				striped at the		
				storage location. Training records		
				are not available		Completed
				at the office.		
				Person		
				responsible for		
				Environmental		Completed
				issues is not		•
				nominated.		
				No commitment		
				to comply with the HSE		
				requirements was		
				foreseen from		O a man la ta al
				management		Completed
				side, workers		
				were without PPE in some cases,		
				Please see		
				Annex B below.		

Date of Visit	Name of	Auditors	Purpose of	Summary of any		Implementat
	Company	Name	audit	Significant Findings	d Actions	ion Status
	Name of			i munigs		
	Contract					
				Many Oil/fuels leakages are observed at the Camp site		Completed
				Hazardous materials (lubricants) are not stored properly		Was not completed at the end of the reporting period December 31, 2020, deadline for improvement was given mid of the Please see para 54-56 below. January 2021
				Hazardous and non-hazardous wastes are on site without proper care;		Please see comment above
				Top Soil is not striped before using the area for temporary storage		Completed
				Smoking is allowed only at specially dedicated places		Completed
				Workshop where are stored flammable substances is full		Completed

Date of Visit	Name of Company Name of Contract	Auditors Name	Purpose of audit	Summary of any Significant Findings	Implemente d Actions	Implementat ion Status
				of cigarette butts.		

#### 3.3 Issues Tracking (Based on Non-Conformance Notices)

- 49. Non-Conformances have been observed during the site visits under CHI-01 and MAR-01 sub-projects. The contractors were always informed on the detected non-conformances and were demanded to improve on the deadline set and send photos of improvements. Environmental team of HILL and UWSCG/USIIP monitored the improvements during the next monitoring visits. No Non-conformance Notices were issued during the reporting period under MAR-01 sub-project (please see Annex C), only verbal instructions were given to contractor under CHI-01 sub-project in order to improve the situation and send the improved photos of sites to SC and UWSCG.
- **50.** A summary of the identified environmental issues for July-December 2020 is presented in Table 10 and Table 11 below.

Total Number of Issues for Project	14
Issues Opened This Reporting	
Period	4
Issues Closed This Reporting	
Period	10
Percentage Closed	71%

#### Table 10: Summary of Issues Tracking Activity for Current Period CHI-01

- 51. As it is presented in table 10 above, four issues are still opened during the reporting period under CHI-01 sub-project: (i) CC H&S officer to updated logbook for fixing accidents and near misses and kept at camp site; (ii) GRM logbook to be prepared and kept at camp site; (iii) Storage territory internally should be arranged properly and cleaned regularly (Please see Annex B: Photo-03); (iv) The camp yard should be covered with gravel (please see Annex B, photo-04, photo-05); (v) Noise from the construction activities should not cause disruption and nuisance to nearby community and other sensitive receptors (i.e. school, hospitals). Deadline for improvement was given by the mid of January 2021, please see Table 18 below.
- 52. The UWSCG Department of Environment protection and Permits (DEPP) and its USIIP Environmental Specialist, Ms. Kate Chomakhidze, as well as IPMO / UWSCG have always discussed the inconsistencies and findings presented in Table 10 above with the contractor. In some cases, this has led to online meetings to discuss non-compliances identified during the site visit and mitigation measures that need to be implemented immediately.
- **53.** DEPP, together with IPMO / Project Management, will continue to discuss these issues with contractors in the next reporting period, and the minutes of these meetings, as well as key findings, will be reflected in the next semi-annual EMR, January-June 2021.

#### Table 11: Summary of Issues Tracking Activity for Current Period MAR-01

Total Number of Issues for Project	19
Issues Opened This Reporting	
Period	4
Issues Closed This Reporting	
Period	14
Percentage Closed	74%

- 54. Four issues are still opened during the reporting period under MAR-01 sub-project: (i) Contractor have to submit for approval license, working plan and reinstatement plan for quarry, all this documents are the part of the state requirements; (ii) No commitment to comply with HS&E requirements was foreseen from management side (Annex B: Photo-08, Photo-09, Photo-10); (iii) Many Oil/fuels leakages are observed at the Camp site (please see Annex C Non-Compliance Note, 19 November 2020, photo-documentation) (iv) Hazardous materials (lubricants) are not stored properly (Annex C Non-Compliance Note, 19 November 2020, photo-documentation), All improvements will be done until 18 January 2021, since deadline for improvement was given by that time (please see Table 18). This will be reflected in the next semi-annual EMR 2021.
- **55.** In order to resolve the aforementioned inconsistencies, DEPP and IPMO discussed these issues with representatives of the contractor's team.
- **56.** Discussions and meetings will continue with the EH&S team of contractors to ensure compliance with the standards, and minutes of the discussions as well as improved site photos will be presented at the next SAEMR, January-June 2020.

#### 3.4 Trends

**57.** Summary of identified trends under CHI-01 and MAR-01 sub-projects during the reporting period – July-December 2020 is presented in the Table 12 below.

Semi-Annual EMR No	Total No of Issues	% issues Closed	% issues closed late
January-June 2020	19	77%	23%
July-December 2020	33	73%	27%

Table 12: Summary of identified trends in environmental issues

58. As it was already mentioned above all EH&S issues still opened under the CHI-01 and MAR-01 sub-projects are presented in the table 18 below. Deadlines for improvement of situation is indicated mid-January 2021. The Summary of identified trends under CHI-01 and MAR-01 sub-projects during the reporting period – July-December 2020 is presented in the Table 12 above.

#### 3.5 Unanticipated Environmental Impacts or Risks

**59.** During the reporting period, COVID-19 is viewed as an unanticipated impact and risk to the community and workers, however, IPMO, SC and CC have taken all appropriate measures to minimize this risk. These measures, inter alia, included updating the relevant SEMPs by the

contractor, developing emergency management plan by SC, etc. More details are provided in paragraphs 32-37 above.

## 4. RESULTS OF ENVIRONMENTAL MONITORING

#### 4.1 Overview of Monitoring Conducted during Current Period

- **60.** During the reporting period Environmental measurements of Noise level and ambient air Quality were carried out by contractor under CHI-01 and MAR-01 sub-project, since construction activities under MAR-02 has not started yet.
- 61. Noise standards defined by IFC/WHO 1999, are presented in the Table 13 below.

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

#### Table 13: Noise Level Guidelines

**62.** Air pollution standards by IFC/WHO 1999, are presented in the Table 14 below.

#### Table 14: Air pollution Guidelines

Contaminants	IFC/WHO Guideline Value (Limit) mg/m <sup>3</sup> ))			
1	2			
	(*IFC does not have a standard for "inorganic dust". Instead IFC applies standards for PM2.5 and PM10).			
Inorganic dust	PM10 – 0,02/1 Year			
	0,05/24 Hour			
	PM2,5-0,01/1 Year			
	0,025/24 Hour			
Carbonic monoxide	n/a			
Nitrogen dioxide (NO <sub>2</sub> )	0,2/ 1 Hour			
	0,04/1 Year			
Aldehyde	n/a			

- **63.** During the reporting period monitoring measurements of noise, vibration ambient air quality under CHI-01 sub-project were conducted by OJSC "Akkord Georgia" and Ltd "GREENTECS". Location and data are included in the table 15 below.
- 64. According to data received noise level exceeds the standards of the National Regulations and World Health Organization (IFC/WHO),1999 in Chiatura and therefore additional mitigation measures are required and presented in Table 18: Recommendations to Address Environmental Issues under CHI-01 sub-project. IFC/WHO standards for Noise and Air pollution are presented in Tables 13 and Table 14 above. It should be noted also that measurements carried out at the nearest receptors of construction sites, were temporary and conducted during the daytime from 13:10 pm to 17:00 pm and no complaints were received from the local population about the noise during the reporting period.

# Table 15: Environmental Quality Measurement Noise, Vibration, Dust in Chiatura, July December 2020

Measurement Point		Measurement Results								
Location		Coordinates	Noise dB	Vibro Speed		Vibro Acceleration		Dust Mg/M <sup>3</sup>		
				mm/s	db	m/s <sup>2</sup>	db	PM25	PM10	Total
"Sahkere Road"	Chiatura	38T0365554 4687004	91.2	0.9	85	1.9	125	0.138	0.178	0.460
7+120										
"Sahkere Road"	Chiatura	38T035379 4686963	79.4	0.1	66	0.2	106	0.165	0.214	0.479
7+300										
"Sahkere Road" 12+20	Chiatura	38T362052 4684982	82.9	0.3	76	0.2	106	0.127	0.165	0.423
12+20										
Chiatura Street, George's street		38T0358802 4682566	91.2	0.2	72	0.5	114	0.112	0.163	0.212
T-20										

Measurement Point			Meas	urem	ent Re	sults			
Chiatura Street, George's street T-15-19	38T0358729 4682484	70.2	0.1	66	0.1	100	0.098	0.126	0.184
Chiatura Street, George's street T-15-19	38T358573 4682226	53.3	<0 .1	<66	<0.1	<100	0.53	0.081	0.116

**65.** Environmental quality measurements of noise, vibration ambient air quality under MAR-01 subproject were conducted by contractor on 30 October 2020. Measurement results were presented in 27 November 2020 (please see Annex A of this report) Location and data are included in the Table 16 below.

## Table 16: Environmental quality measurements results MAR-01, July-December 2020

				Meas	urement	results	
#	Location	GPS coordinates WGS 84	Dust (Total PM), mg/m <sup>3</sup>		Noise dBA (1-hour)		Vibration, mm/s <sup>2</sup>
			Res ult	Permis sible	Re sul t	Permiss ibl e	
1	Marneuli, Jandari reservoir (3m from nearest house)	N4594928 E482885	0.07	0.15- average; 0.5–max	49	55	0
2	Marneuli, City Reservoir A	N4593262 E482437	0.08 4		52	55	0
3	#48 Noe Jordania street, Marneuli	N4588815 E460925	0.05 9		48	55	0

66. According measurement data of 30 October 2020 noise level doesn't exceed the standards of the National Regulations and World Health Organization (IFC/WHO),1999 in Marneuli and therefore no additional mitigation measures are required. IFC/WHO standards for Noise and Air pollution are presented in Tables 13 and 14 above. It should be noted also that environmental quality measurements carried out at the nearest sensitive receptors of construction sites, were temporary and conducted during the daytime from 13:30 am to 16:00pm and no complaints were received from the local population about the noise during the reporting period.

## 4.2 Trends

67. All mitigation measures identified within the IEE/EMP, SEMPs under CHI-01 and MAR-01 subprojects are effective and no additional measures are required.

## 4.3 Summary of Monitoring outcomes

**68.** Noise level during the construction period under CHI-01 sub-project exceeded the existing standards of IFC/WHO and therefore additional mitigations measures are required from contractor, those are presented in table 13 above.

## 4.4 Material resources Utilization

## 4.4.1 Current Period

**69.** The following information for material resources utilization was provided by the contractor within the framework of the MAR-01 sub-project during the reporting period July-December 2020.

## Table 17: Material Resources Utilized under MAR-01 sub-project

Item	Quantity
Water	3,030.00 m <sup>3</sup>
Electricity	32,600.00 kw
Natural Gas	1450.00 m <sup>3</sup>

**70.** The contractor didn't provided data on material resources utilization under CHI-01 sub-project. Contractor is strongly requested by IPMO and SC to provide this information for the next reporting period, which will be reflected in the next SAEMR, January-June 2021 respectively.

## 4.4.2 Cumulative Resources Utilization

N/A

4.5 Waste Management

## 4.5.1 Current Period

- **71. CHI-01:** At the construction sites under the CHI-01 sub-project are mainly produced household, construction (inert, surplus soil) and hazardous waste.
- **72.** Mainly household waste is collected in municipal containers. Local municipality is responsible for the disposal of household waste.
- 73. The local Municipality of Chiatura is responsible for the disposal of household waste under CHI-01 sub-project, LTD "Sanitary" is constructed by contractor "AKKORD" for the disposal of hazardous waste. For disposal of Inert waste, the special place is allocated for contractor which is previously agreed with the Municipality of Chiatura.

- **74. MAR-01:** At the construction sites under MAR-01 sub-project are mainly produced household, construction (inert, surplus soil) and hazardous waste.
- **75.** Mainly household waste is collected in municipal containers. Local municipality of Marneuli is responsible for the disposal of household waste under MAR-01 sub-project.
- **76.** LTD "Sanitary" is constructed by contractor for the disposal of hazardous waste. For disposal of Inert waste the special place is allocated for contractor which is previously agreed with the Municipality of Marneuli.

## 4.5.2 Cumulative Waste Generation

Not yet applicable.

## 4.6 Health and Safety

## 4.5.1 Community Health and Safety

**77.** No community incidents have been reported by SC during reporting period under CHI-01 and MAR-01sub-projects.

## 4.5.2 Worker Safety and Health

## CHI-01

- **78.** Environmental H&S specialist of contractor under CHI-01 sub-project Mr. Tengo Kalmakhelidze was performing day-to-day monitoring of Health & Safety on the Sites and press the Contractor to improve the provision of trench barriers in roads and to provide suitable work boots for the labour force.
- **79.** Health & safety and environment issues which were covered during the reporting period are as follows:
  - Ground works;
  - Manual works;
  - Removal waste;
  - PPE;
  - Housekeeping;
  - Reinforcement;
  - Dust and Noise Measurements
  - Upgrade Safety Hard and Warning Barricade
- **80.** Despite the fact that SC and UWSCG / USIIP strictly requested from contractor to adequately fill the Near Misses forms and reflect in their monthly monitoring reports no Near Missis were reported by contractors under CHI-01 and MAR-01 sub-projects during the reporting period. Discussions will be continued and the filled Near Misses as well as the minutes of meetings will be provided in the next SAEMR, January-June 2021.

## **MAR-01**

81. Environmental H&S specialist of contractor under CHI-01 sub-project Mr. Vakhtang Burchuladze was performing day-to-day monitoring of Health & Safety on the Sites and

press the Contractor to improve the provision of trench barriers in roads and to provide suitable work boots for the labour force.

- **82.** Health & safety and environment issues which were covered during the reporting period are as follows:
  - PPE;
  - Ground works;
  - Manual works;
  - Housekeeping;
  - Reinforcement;
  - Upgrade Safety Hard and Warning Barricade
- **83.** During the reporting period, no Near-Misses were identified by contractor within the framework of the MAR-01 subproject.
- 84. SC and UWSCG / USIIP strictly requested from contractor to adequately fill the Near Misses forms and reflect in their monthly monitoring reports (Near Misses form filled by contractor are provided in the Annex C of this report).
- **85.** Additional meetings will be conducted with the contractor and minutes of meetings will be presented in the next SAEMR, January-June 20221.

## 4.7 Training

- 86. On site environmental and H&S safeguard training were conducted for environmental team of MAR-01 and CHI-01 sub-projects on a regular basis. Environmental specialists of contractors were introduced with all necessary safeguard requirements of ADB/SPS 2009.
- 87. COVID-19 workplace safety trainings were carried out as well to reduce the potential for COVID-19-related illness including education of employees on hygiene, face-covering and cleaning measures needed to prevent the virus from.

# 5. FUNCTIONING OF THE SEMP

# 5.1 SEMP Review (prepared and updated under USIIP/T6, including CHI-01, MAR-01 and Mar-02 sub-projects)

- **88.** The SEMP for Chiatura's water supply network was prepared and approved in January 2020 and further updated and approved during the reporting period, in August 2020 due to changes in the project design.
- **89.** The following SEMPs have been prepared and approved under CHI-01 and MAR-01 sub-project during the previous reporting periods:

## CHI-01 Sub-project:

- SEMP for CAMP site (approved in August 2018)
- SEMP for Sachkhere Reservoir (approved in August 2018);
- SEMP for Bisi Reservoir (approved in September 2018);
- SEMP for Lezhubani Reservoir (approved in September 2018);
- SEMP for Navardzeti Reservoir (approved in September 2018);
- SEMP for Perevisy Reservoir (approved in September 2018);
- SEMP for Rustaveli reservoir (approved in September 2018);
- SEMP for Tekhisa Reservoir (approved in September 2018);
- SEMP for Chiatura Well fields (approved in November 2018)
- **90.** The following SEMPs have been updated due to the changes in project design under CHI-01 sub-project.
  - SEMP for Sachkhere reservoir (December 2019)
  - SEMP for Bisi Reservoir (December 2019)

## MAR-01 sub-project:

- SEMP for Jandary Reservoir (approved in March 2019)
- SEMP for Kolagiri Pumping Station (approved in March 2019);
- SEMP for CAMP (approved in May 2019)
- SEMP for City Reservoir

## MAR-02 sub-project:

- SSEMP for MAR-02 (approved in March 2020).
- **91.** All SEMPs were prepared by Contractor, endorsed by SC and approved by UWSCG. SEMPs were reviewed/commented by the RETA International Environmental Consultant of ADB under RETA 9541 Ms. Keti Dgebuadze.

# 6. GOOD PRACTICE AND OPPORTUNITY FOR IMPROVEMENT

## 6.1 Good Practice

**92.** There is need to improve close monitoring, guidance and interactions between IPMO, consultant supervision team and contractors to avoid non-conformances and improve current situations in order to improve the tracking of actions to address non-conformances under USIIP/T6 sub-projects.

## 6.2 **Opportunities for Improvement**

**93.** During the next the reporting period the tracking of actions to address non-conformances will be improved by PIU. Close monitoring, guidance and interactions between PIU, SC and CC will be improved to avoid non-conformances and improve current situations. All non-conformances addressed will be reflected in the next SAEMR, January-June 2021.

## 7. SUMMARY AND RECOMMENDATIONS

## 7.1 Summary

- **94.** Individual and joint on-site monitoring activities were conducted by Environmental Monitoring Specialist of SC, Mr. Rezo Enukidze and Environmental Specialist of USIIP Ms. Ketevan Chomakhidze.
- **95.** Due to the fact that The World Health Organization (WHO) on March 11, 2020, has declared the novel coronavirus (COVID-19) outbreak a global pandemic the Government of Georgia and its Ministry of Internally Displaced Persons from the Occupied Territories, Labor, Health and Social Affairs of Georgia, issued the General Guidelines Related to Infection (COVID-19) which applies to all sectors of economic activity.
- **96.** The General Guideline for COVID-19 was also developed by the Government of Georgia specifically for the construction sector.
- 97. This Guidance for Construction Activities during the COVID-19 was created to provide owners/operators of construction projects and their employees and contractors with precautions to help protect against the spread of COVID-19 as indoor and outdoor construction sites.
- **98.** An emergency response plan was developed by SC for preventions of employees workers against the COVID-19 as well.
- 99. In accordance with the IEE, the Contractor was required to undertake parametric measurements and observations on air quality and noise under CHI-01 and MAR-01 subprojects.
- **100.** Noise level exceeded the existing standards of national and international regulations under CHI-01 sub-project. Additional mitigation measures to improve the situation are provided in the Table 18 below.

## 7.2 Recommendations

- **101.** During the reporting period, from July-December 2020, the T6 of Investment Program was implemented in accordance with the requirements of ADB SPS 2009 and the National Legislation.
- **102.** More detailed recommendations for the implementation of T6 during the next reporting period January-June 2021 are provided in the Table 18 below:

## Table 18: Recommendations to Address Environmental Issues under CHI-01 subproject

Recommendations CHI-01 sub-project	
Recommendations CHI-01	Implementation status and

Recommendations CHI-01 sub-project	-
	date
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 imediately during the first week of January:
	Plan activities in consultation with SC and IPMO/UWSCG so that activities 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)
	Install noise barriers (e.g., panels, curtains, or partitions) to reduce the emission of engine noise.
	Conduct meetings with population and provide information related to schedule of construction activities and noise caused by the project activities.

Recommendations CHI-01 sub-project	
CC H&S officer to updated logbook for fixing accidents and near misses and kept at camp site.	The contractor is given a strong instruction to improve
GRM logbook to be prepared and kept at camp site.	the situation by the mid- January 2021 and constantly
Storage territory internally should be arranged properly and cleaned regularly	maintain an improved standard.
The camp yard should be covered with gravel	
Recommendations MAR-01	Implementation Status and Date
Contractor have to submit for approval license, working	The contractor is given a
<ul> <li>plan and reinstatement plan for quarry, all this documents are the part of the state requirements.</li> <li>No commitment to comply HSE with project and stat requirements is foreseen from management side</li> <li>Many Oil/fuels leakages are observed at the Camp site Hazardous materials (lubricants) are not stored properly.</li> </ul>	strong instruction to improve the situation by the mid January 2021 and constantly maintain an improved standard.
documents are the part of the state requirements. No commitment to comply HSE with project and stat requirements is foreseen from management side Many Oil/fuels leakages are observed at the Camp site	strong instruction to improve the situation by the mid January 2021 and constantly maintain an improved
documents are the part of the state requirements. No commitment to comply HSE with project and stat requirements is foreseen from management side Many Oil/fuels leakages are observed at the Camp site	strong instruction to improve the situation by the mid January 2021 and constantly maintain an improved

**103.**Conduct quarterly monitoring of Noise and Air quality under CHI-01 project at the nearest sensitive receptors. The schedule of environmental quality measurements to be carried out during the next reporting period, January-June 2021 is presented in the Table 19 below.

Table 19: Conduct Monitoring of Environmental Quality under CHI-01 project

Parameters	Quarterly measurement
Dust	March 2021
PM <sub>2.5</sub> and PM <sub>10</sub>	March 2021
Vibration	March 2021
Carbon monoxide	March 2021
Nitrogen dioxide	March 2021
Noise	March 2021

**104.**Conduct quarterly monitoring of Noise and Air quality under MAR-01 project at the nearest sensitive receptors. The schedule of environmental quality measurements to be

carried out during the next reporting period, January-June 2021 is presented in the Table 20 below.

Parameters	Quarterly measurement
Dust	March, June 2021
PM <sub>2.5</sub> and PM <sub>10</sub>	March, June 2021
Vibration	March, June 2021
Carbon monoxide	March, June 2021
Nitrogen dioxide	March, June 2021
Noise	March, June 2021

## Table 20: Conduct Monitoring of Environmental Quality under MAR-01 project

**105.**Conduct baseline environmental measurements of Noise and Air quality under MAR-02 sub-project during the next reporting period of January-June 2021.

## Table 21: Conduct Monitoring of Environmental Quality under MAR-01 project

Parameters	Quarterly measurement
Dust	February 2021
PM <sub>2.5</sub> and PM <sub>10</sub>	February 2021
Vibration	February 2021
Carbon monoxide	February 2021
Nitrogen dioxide	February 2021
Noise	February 2021



## ANNEX A: ENVIRONMENTAL QUALITY MEASUREMENT DATA

## Environmental Quality Measurement Data (MAR-01), 27 November 2020

6	HIII International	neise	* Se	(III)
United Water Supply Company of George LLC	W of Hill International N.V., Terretta International Conto	Engineering G King Cristal	colors Inc., and Policy and Manager	Anth Group Cus
			ACG-ICE-MAR-DL	
	ntrait karse: Construction of Warser Augusty and 5 Technology 2012	energia Spito	HALLS Married and Smallings System Delivery managements (1993)	m and Collector in Bohiai
Conception in the local division of	OR No.: 0209		nie al flacebre	27.11.2020
No	ise, Vibration and Ambient Air Quality I	Measureme	ints Results for October, 202	5
Signature:	Nasir Mirzayes	3		нах
~	AKELIK GROUP 427726124 FOR CONSTRUCTION		offi MARNE	ce Manager/EO
Submitted for			<ul> <li>Review and Sconnect</li> <li>Approval</li> <li>Your information</li> </ul>	
Roles, vilicatios and Archery Ar D	Description Dailby Mascurements Results for Docober, 2020	here	Giàcutterri Type	Quartity/Pages
1	Construction and the second of accessing struct	a	(959)	1 page AA
1				-
5) Brighteon's Commentar				
Bogilsen'i Commenta				
Bogilsen'i Commenta	P Approve		sproved as Mabed mdss and he Submit	# Asjacrost u For info &
Englisser's Comments:	P Approve	0.8		
Engliseer's Commenta actual of Transcription second Englishers	n Approve	0.8	evite and He Saberit	II For infly 8.
Engliseer's Commenta Engliseer's Commenta Secure of Transmittal secure tingineers generate: Approve	P Approvel	0 R	ndra and ho liabout	n Forielle &
Rathas of Transerilital Rathas of Transerilital Research Engineers		0 R	ndra and ho liabout	n Forielle &

Noise, vibration and	ambient air qualit	measurement results
----------------------	--------------------	---------------------

All S

	Location	GPS coordinates	Measurement results					
		WGS 84		Dust (PM), mg/m <sup>3</sup>		Noise, Db		
		-	Result	Permis sible	Result	Permissible		
1	Marneuli, Jandari reservoir (3m from nearest house)	N4594928 E482885	0.072	0.15- average; 0.5-max	49	55	0	
2	Marneuli, City reservoir A	N4593262 E482437	0.084		52	55	0	
3	Mameuli, 48, Noe Jordania street	N4591167 E483819	0.059		48	55	0	

30.10.2020

## **ANNEX B: PHOTOS OF SITES**

CHI-01

CHI-01 – Improper reinstatment of road after laying of sewerage line (Photo-01)



CHI-01 - Laying water supply pipes (Photo-02)



CHI-01, CAPM site, warehouse (Photo-03)



CHI-01 CAMP site not covered with Gravel (Photo-04, Photo-05)





CHI-01 - Oil speal toolkits, CAMP site, warehouse (Photo-06)



# MAR-01 Project

DN 200mm Sewerage Pipeline in Bolnisi 2020 (Photo-07)



MAR-01 Sewerage Lines – Marneuli (Photo-08)



MAR-01 Sewerage Lines – Marneuli (Photo-09)



Sewerage Lines – Bolnisi (Photo-10)



MAR-01, Jandari Reservoir (Photo-13)



MAR-01, Roofing in Kolagiri (Photo-14)



MAR-01, Concrete work in City Reservoir (Photo-15)



MAR-01, Abandond works in Marneuli (Photo-16)



## ANNEX C: NON-COMPLIANCE NOTICE, MAR-01, 18 November 2020

## Non-Compliance Notice

Project: Construction Supervision (under USIIP, Tranche 6 Projects), UWSCG-ICB-MAR-01-2018 (re-bid)	
Contract No: CONSTRUCTION OF WATER SUPPLY AND SEWERAGE SYSTEMS IN MARNEULI AND SEWERAGE SYSTEM AND COLLECTOR IN BOLNISI	Non-compliance Notice
Contractor: "AKELIK GROUP" OJSC	Contractor's Quarry
Reference:	
This notice is to advice the prime Contractor, on the referenced Contract, measures to be implemented <b>urgently</b> .	of the following notice on environmental
COMMENT FOR QUARRY SITE:	
Contractor have to submit for approval license, working plan and reinstat	ement plan for quarry, all this documents are
the part of the state requirements.	ement plan for quarry, an tins occuments are
Top Soil must be prevented from damage. It is not happening according stripped and placed safely for future reinstatement works. Training records are available;	to the photo in the report. Topsoil had to be
Environmental Representative is not nominated and thus unprofessional (	performance is in place
NON-COMPLIANCE	
- Top Soil not striped;	
<ul> <li>Top soil is not stored;</li> </ul>	
<ul> <li>Document regarding quarry are not provided;</li> </ul>	
3	

All these conditions have to be remedied within 10	) days by the prime Contractr
All these conditions have to be remedied within 10 ✓ Propped documentation must be provided	
	4;
<ul> <li>Propped documentation must be provided</li> </ul>	4;

## NON-COMPLIANCE NOTICE, MAR-01, 19 November 2020

## Non-Compliance Notice

Project: Construction Supervision (under USIIP, Tranche 6 Projects), UWSCG-ICB-MAR-01-2018 (re-bid)		
Contract No: CONSTRUCTION OF WATER SUPPLY AND SEWERAGE SYSTEMS IN MARNEULI AND SEWERAGE SYSTEM AND COLLECTOR IN BOLNISI	Non-compliance Notice: Road Reinstatement	
Contractor: "AKELIK GROUP" OJSC		
Reference:		
This notice is to advice the prime Contractor, on the referenced Contract, measures to be implemented <b>urgently</b> .	of the following notice on environmental	

#### GENERAL COMMENTS FOR SITE:

Post construction site is not repaired to the condition required by Project standards. One of central streets is damaged to that extent that is creating problems to local community. Condition of the road in the dry weather is a source of dust and during the rains source of mud. At the same time holes exiting on the road forcing drivers to drive unstable and this causes additional air pollution from fuel.

Safety signs are not placed to warn population that this part of the road in damaged and drivers have to be very careful. Relevant traffic signs and flagmen should control traffic movement properly.

Training records are not available;

Environmental representative is not nominated.

#### NON-COMPLIANCE

- Road Safety signs have to be placed to warn drivers;
- The road has to be repaired ASAP;
- Environmental representative have to be nominated





## NON-COMPLIANCE NOTICE, MAR-01, CAMP SITE, 19 November 2020,

#### **Non-Compliance Notice**

Project: Construction Supervision (under USIIP, Tranche 6 Projects), UWSCG-ICB-MAR-01-2018 (re-bid)		
Contract No: CONSTRUCTION OF WATER SUPPLY AND SEWERAGE SYSTEMS IN MARNEULI AND SEWERAGE SYSTEM AND COLLECTOR IN BOLNISI	Non-compliance Notice	
Contractor: "AKELIK GROUP" OJSC	Marneuli Camp 01	
Reference:		
This notice is to advice the prime Contractor, on the referenced Contract, measures to be implemented <b>urgently</b> .	of the following notice on environmental	
GENERAL COMMENT FOR ALL SITES:		
Waste Management Plan is not Submitted. Site is not arranged properly a cigarette butts. All construction materials and wastes should be properly s response kits are not in place although engineer has advised many times t All equipment must be checked against lubricant and fuel leaking, because repairmen in are which is not allocated for this activities. Refuelling station kit and fire relevant fighting equipment; drip tray should be used for fuel s the storage location. Training records are not available at the office.	egregated and stored adequately, Oil spill o deploy equipment at appropriate locations. e many of equipment are spilling or are under n and trucks should be equipped with the spill	
Person responsible for Environmental issues is not nominate.		
No commitment to comply HSE with project and stat requirements is fore	seen from management side	
NON-COMPLIANCE IN Marneuli		
Marneuli Camp;		
<ul> <li>Many Oil/fuels leakages are observed at the Camp site;</li> </ul>		

- Hazardous materials (lubricants) are not stored properly;
- -Hazardous and non-hazardous wastes are on site without proper care; .
- -Top Soil is not striped before using the area for temporary storage;
- 4 Smoking is allowed only at specially dedicated places;
- Workshop where are stored flammable substances is full of cigarette butts; ÷.

l	
I	

T







# ANNEX D: GENERAL GUIDELINES RELATED TO INFECTION (COVID-19) CAUSED BY NOVEL CORONAVIRUS (SARS-CoV-2) FOR CONSTRUCTION SECTOR



MINISTRY OF INTERNALLY DISPLACED PERSONS FROM THE DOCUPIED IEPOILTORIES, CABLOH, HEALTH AND EDOIAL AFFAIRS OF GEORGIA

Labour Conditions Inspection Department Create Together Safe Working Environment

Annex Nº2

## General Guidance Related to Infection (COVID-19) Caused by Novel Coronavirus (SARS-CoV-2) for Construction Sector

Note: In accordance with Order N281/N of the Minster of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs of Georgia on "the rule for Examination for Short-term Employment Disability and Issuance of Doctors Note", the Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs of Georgia will issue an equivalent document to the doctors excuse note (Medical Certificate) to persons quarantined in order to prevent the spread of coronavirus. The document will serve as the basis to receive monthly payment and therefore, the working days spend in quarantine or in self-isolation will be legitimate and fully paid to the employees. In order to get the certificate, an interested person has to apply to the Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs of Georgia at -

For further information, please contact: 📞 15 05 📞 116 001



The job of builders involves constantly changing work places and work activity existing in open-air conditions. For this reason, in terms of virus spread, construction falls within the medium risk sector because its specificity covers ratural ventilation. Nevertheless, it is important to consider the following preventive measures at construction work.



#### The staff must not appear in the workplace if they :

- Left the affected country over the past 14 days;
- Were in close contact with infected person/persons for the past 14 days (they must be selfisolated/quarantinec as per the rule);
- Have symptoms of respiratory infection (coughing, temperature sneezing, difficulty in breathing, general weakness etc.);
- Are among the ones who have high risk of getting infected with COVID-19 or serious complications: over 70 years of age people suffering from chronicle diseases (cardio-vascular diseases, diabetes, bronchial asthma and other respiratory diseases.

#### Employer's responsibilities

- Whether or not the incidence of infection is detected, employer should develop an emergency action plan to support reduction of working days missed due to illness, and in case of detection – prevention of spread;
- Provide employees with information about safe working procedures and about prevention of virus spread (guide with the recommendations defined by LEPL L. Sakvarelidze National Center for Disease Control and Public Health of the Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs of Georgia);
- Inside the working space post announcements about COVID-19 and about the preventive measures that have been identified by LEPL L. Sakvarelidze National Center for Disease Control and Public Health;
- In relation to the employees who can perform job remotely (administrative personnel) ensure as much as possible use of such working mode;
- At the entrances of break room/dining room, place disinfecting rugs with relevant mandatory sign marking;
- Provide hand-washing facility with scap and other disinfectants. If hand-washing facility is not feasible, at least 70% alcohol based hand cleansing liquid should be used:
- Visibly place the hand sanitizers and post the rules of their proper use;
- Make sure that employees have access to hand sanitizers and are aware of their use with proper rules;
- Provide all employees and contractors, personnal responsible for cleaning with information about relevant preventive measures to avoid spread of coronavirus in the working environment;
- Train the employees in proper use and further storage/removal of personal protective equipment and disinfectants;



2

- Depending on their work specificity, provide the employees with necessary personal protective equipment (protective clothing, protective shoes, helmet, gloves, respirator) and establish control on their use;
- Periodically, several times a day ensure natural ventilation of closed spaces/facilities;
- At certain periodicities disinfect frequently used working equipment and working places;
- Maintain ergonomics at construction site. Ensure timely cleaning of working space and timely disposal of construction waste.
- For employees and visitors ensure closed containers for used disposable tissues and other used hygienic waste in the working space.

## Employees' responsibilities

Ensuring proper hand hygiene regularly and thoroughly is the best way to be protected from most of the viruses. Therefore, it is necessary to take the following measures in the workplace:

- Follow hygiene rules in your workplace;
- Carry out the working process in accordance with emergency situations action plan defined by employer/occupational safety manager;
- When greeting do not shake hands and avoid contact with others (touching etc.);
- Avoid gatherings, it is recommended not more than 10 people in one working platform by keeping a safe distance (at least 2 m);
- > While performing your work, fully use personal protective equipment provided by the employers;
- Treat with disinfectants the working places and tools used in the course of the work;
- Before and after taking meals, before and after using the restrooms thoroughly wash your hands with soap and water. After washing dry your hands well;
- If you can not wash and dry your hands, use alcohol-based hand sanitizers;
- Keep safe distance (at least 2 m);
- While coughing or sneezing, cover the face with a clean tissue or elbow and place used dispensable tissue in the waste bin:
- > Avoid touching your eyes, nose and mouth with your hands.





- These recommendations have been developed to be communicated to all employers, workers and stakeholders. Everyone is urged to regularly promote and adhere to this document;
- Site inductions should be updated as required to include information on coronavirus (COVID-19) potential risks and workplace specific controls that have been implemented such as daily screening, health checks and symptoms of coronavirus (COVID-19), staggered start, finish and meal times, good hygiene practices and cleaning regimes and PPE requirements;
- 4. Toolbox talks should be regularly conducted, and workers are to be encouraged to put forward practical ideas for changing work practices to avoid the spread of coronavirus (COVID-19). Toolbox talks should also provide clarity to workers on leave arrangements for those that cannot work, and to encourage self-reporting and minimize the spread of risk;
- Toolbox talks should also include updates from the responsible Health Officer as they occur and additional information on the severity of the pandemic and the importance of physical distancing at toolbox meetings.

#### 15. Other measures

- Construction sites are diverse and vary in complexity, employers must apply a riskbased approach and implement reasonably practical controls based on the environment and specific hazards at each construction site. In addition to the aforementioned measures and controls mentioned in this section, employers should consider other measures for implementation such as:
  - Using alternatives to face to face meetings where practicable;
  - Reducing the length and size of meetings, especially for critical employees, by requiring some or all to dial in;
  - consider off-site fabrication;
  - ensuring working from home arrangements are enabled where feasible;
  - Structuring management teams to ensure contingency in the event of team members needing to be isolated or quarantined at home.

#### 16. Vulnerable workers

 Has been identified the following groups of people as vulnerable workers in relation to coronavirus (COVID-19):

- people over the age of 70;
- people with chronic diseases (cardiovascular disease, diabetes, bronchial asthma and other respiratory diseases)
- 2. Where practical, reasonable action should be taken to minimize vulnerable workers

from conducting higher risk roles.

#### 17. Summary of recommendations and responsibility

#	Activity	Responsible for implementation
1.	To provide employees with the information about the work safety procedures and prevention of virus spread (guided by the recommendations of the Ministry of Internally Displaced Persons from the Occupied Territories, Labor, Health and Social Affairs of Georgia and LEPL L. Sakvarelidze National Center for Disease Control and Public Health)	Employer
2.	To place ads in the workspace about the COVID-19 and its preventive measures defined by the LEPL I. Sakvarelidze National Center for Disease Control and Public Health	Employer
3.	To ensure maximum use of remote work in relation to those employees who can perform work remotely (administrative personnel)	Employer
4.	To put mattings at the entrance of the lounge room / dining room, with the relevant sign of indication	Employer
5.	To ensure hand washing at the workspace with appropriate soap and other hygiene products. In case of inability to wash hands, to provide with at least 70% alcohol-based hand cleaning liquids	Employer
6.	To place hand sanitizers and the instruction for their proper use in a prominent place	Employer
7.	To ensure that employees have access to hand sanitizers and know how to use them in accordance with the relevant instructions	Employer
8.	To provide information to all staff and contractors, as well as cleaning staff, on appropriate preventive measures to avoid the spread of coronavirus in the work environment	Employer
9.	To train the employees on the proper use of personal protective equipment and its subsequent storage / disposal	Employer
10,	To provide employees with the necessary personal protective equipment (overalls, special shoes, helmet, gloves, medical mask) based on the specifics of their job and establish control over their use	Employer
11.	Periodically, several times a day ensure natural ventilation of indoor spaces/closets	Employer
12.	Periodically ensure disinfection of workplaces and frequently used equipment	Employer
13.	To keep ergonomics in order at the construction site. To ensure the prompt cleaning of workspace and removal of construction waste	Employer
14,	To ensure placement of closed containers for the disposable napkins and other hygiene waste used by both employees and visitors	Employer
15.	Follow the rules of hygiene at your workplace	Employee

16.	Carry out the work process in accordance with the Emergency Action Plan defined by the employer / work safety manager	Employee
17.	Avoid shaking hands and direct contact with others (touch, etc.) while saluting	Employee
18.	Avoid gathering, the work of more than 10 people on one work platform at a safe distance (less than 2 m) is not recommended	Employee
19.	When performing the work, make full use of the personal protective equipment provided by the employer	Employee
20.	Clean the workplaces and the tools and equipment used during the work process with disinfectants	Employee
21.	Thoroughly wash your hands with soap and water before and after eating, as well as before and the bathroom. Dry your hands thoroughly after washing	Employee
22.	Use alcohol-based hand sanitizers in case if you are unable to wash and dry your hands	Employee
23.	Keep a safe distance (not less than 1.5 m);	Employee
24.	Cover your mouth with clean napkin or elbow when coughing and sneezing and then throw the used disposable napkin in the trash	Employee
25.	Avoid touching your eyes, nose, or mouth with your hands.	Employee

#### 18. Informational banners for COVID -19



ნიღაბი უნდა ფარავდეს ცხვირისა და პირის მიდამოს. დარწმუნდით, რომ ნიღაბი მჭიდროდაა მორგებული სახეზე



🛞 NCDC.GE 🐛 ცხელе Бабл: 116 001 🎁 07.02.2020

