

# Semi-Annual Environmental Monitoring Report

*Project Number: 43405-025*

*Reporting Period: January-June 2021*

**GEORGIA: URBAN SERVICES IMPROVEMENT INVESTMENT PROGRAM  
(TRANCHE 3)**

**(FINANCED BY THE ASIAN DEVELOPMENT BANK)**

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**For:** The Ministry of Regional Development and Infrastructure of Georgia and the Asian Development Bank

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July 2021

## ABBREVIATIONS

<b>ADB</b>	Asian Development Bank
<b>DC</b>	Design Consultant
<b>DEPP</b>	Department of Environmental protection and Permits
<b>DDR</b>	Due Diligence Report
<b>EA</b>	Executing Agency
<b>EARF</b>	Environmental Assessment and Review Framework
<b>EHS</b>	Environmental Health & Safety
<b>EIA</b>	Environmental Impact Assessment
<b>EIP</b>	Environmental Impact Permit
<b>EMP/ SSEMP</b>	Environmental Management Plan/ Site-Specific Environmental Management Plan
<b>ES/ SES</b>	Environmental Specialist/ Senior Environmental Specialist
<b>GoG</b>	Government of Georgia
<b>GRC</b>	Grievance Redress Committee
<b>GRM</b>	Grievance Redress Mechanism
<b>IPMO</b>	Investment Program Management Office
<b>USIIP</b>	Urban Sector Improvement Investment Program
<b>IA</b>	Implementing Agency
<b>IEE</b>	Initial Environmental Examination
<b>MFF</b>	Multi-tranche Financing Facility
<b>MoEPA</b>	Ministry of Environment Protection and Agriculture
<b>MoRDI</b>	Ministry of Regional Development & Infrastructure
<b>NEA</b>	National Environmental Agency
<b>PMD</b>	Projects Management Department
<b>SC</b>	Supervision Consultant
<b>UWSCG</b>	United Water Supply Company of Georgia
<b>WSS</b>	Water Supply & Sewerage

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## I. INTRODUCTION

### 1.1 Preamble

1. This report represents the Semi - Annual Environmental Monitoring Review (SAEMR) for “Urban Services Improvement Investment Program” (USIIP), Tranche 3 and describes the period of January-June 2021.
2. This report is the 11th Semi-Annual EMR for the T3 of “Urban Services Improvement Investment Program”.

### 1.2 Headline Information

3. During the reporting period, construction work was carried out only under ABA-01 and GUD-03 sub-projects and therefore this report describes the activities performed within the framework of these sub-projects.
4. There were no identified pending non-compliances, most of the problems identified during the site visit were eliminated by the contractor within the proposed deadline. Construction activities were not affected by the COVID-19 pandemic, there were no travel restrictions as well. Workers complied with all regulations, including social distancing from the COVID-19 pandemic.

## 2. PROJECT DESCRIPTION AND CURRENT ACTIVITIES

### 2.1 Project Description

5. 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.
6. 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.
7. Tranche 3 of the Investment Program includes:
  - Construction of Water Supply and Wastewater Network in Ureki/Phase 3 (URE-01);
  - Construction of Wastewater Treatment Plant in Ureki (URE-02);
  - Construction and Rehabilitation of Water Supply System in Kutaisi/Phase 2 (KUT-01)
  - Construction of New Transmission Pipeline in Abasha (ABA-01)
  - Construction of Waste Water Treatment Plants in Gudauri (GUD-03)

#### The following projects are financed under Tranche 3:

8. **<sup>1</sup>Construction of Water Supply and Wastewater Network in Ureki/Phase 3 (URE-01)**. The project comprises of the construction of 1 water supply pumping station and 31 sewage pumping stations (Shekvetili - 18, Ureki - 13; construction of new reservoirs (2,000 m<sup>3</sup> x 3,000 m<sup>3</sup> and 1 x 1,200 m<sup>3</sup>); Distribution network - laying of approximately 70 km water supply pipelines (distribution network will be divided into 3 areas), laying of approximately 70 km sewage pipelines; installation of approximately 1,500 water meters; Wells - drilling of 10 drinking water wells.
9. The Contract is signed with JV of Peri Ltd (Georgia) Leading Partner and Slon LLC (Azerbaijan) on October 28, 2014. Commencement date was November 24, 2014. Initial Completion date was scheduled on November 22, 2018 but due to changes in the design of project, which include the construction of an Aqueduct across the Natanebi River, the construction of Gabion wall to protect well fields from flooding and erosion, and the construction of an additional deep well No. 8 along the banks of the Natanebi River, completion date was extended to September 2019. The project is foreseen to serve 35,000 tourists and 5,400 local inhabitants by year 2040. An independent consultant was hired by SC/EPTIS to conduct Post Construction Audit and to prepare Post Construction Audit Report under URE-01 sub-project. During the reporting period consultant has provided the Draft Audit report. The results and main findings of above report will be reflected in the next Semi-annual EMR July-December 2021.

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<sup>1</sup> T1-T3 BAEMRs may have some overlap, due to the financing arrangements of Ure-01 project, which is simultaneously financed by T1, T2 and T3.

- 10. Construction of Wastewater Treatment Plant in Ureki (URE-02).** The project comprises of the construction of new Wastewater Treatment Plant with the capacity of 6,570 m<sup>3</sup>/day.
- 11.** The contract URE-02 was signed on April 30, 2015 with JV of Ludwig Pfeiffer Hoch-und Tiefbau GmbH and Co.KG ProtechnoSrl (Germany) / Aritim (Turkey), the contract was completed on June 9, 2018.
- 12.** The Post-Construction Environmental Audit was conducted and relevant Audit report was prepared in June 2019.
- 13. Construction and Rehabilitation of Water Supply System in Kutaisi/Phase 2 (KUT-01).** The project envisages construction of Kvitiri 973 m<sup>3</sup>/h capacity and Mukhrani 660 m<sup>3</sup>/h capacity pumping stations; Reservoirs - construction of Near East and Mukhrani reservoirs with the capacity of 9,000 m<sup>3</sup> (2x4,000+1,000). Distribution network - 332.1 km.
- 14.** United Water Supply Company of Georgia signed a contract with SMK Ulusal Insaat Ve Ticaret A.S. (Turkey) for implementation of KUT-01 project on 22 April 2015. The initial date of completion of the contract - June 8, 2018 was extended until July 2020. An independent consultant was hired by SC/EPTISA to conduct Post construction audit under KUT-01 sub-project and submit Post Construction Audit Report to UWSCG and ADB. Draft version of the aforementioned audit report was submitted by consultant on 28 June 2021. The main finding of this report will be reflected in the next SAEMR, July-December 2021.
- 15. Construction of New Transmission Line in Abasha (ABA-01).** Within the ABA-01 project the following major works were carried out: approximately 15 km long 500 mm diameter transmission pipeline was installed from headwork to the town of Abasha, chlorination building was constructed and the water meters were installed at the headwork.
- 16.** The contract for implementation of ABA-01 was signed on October 13, 2017 with AS Inshaat-N, LLC (Azerbaijan). Project completion date was 14th of March 2020. Contractor issued the letter of claim (on 13 Mar 2020) for time extension on ABA-01 project up to 20 May 2020. The Engineer submitted its determination until 12th May, 2020 that was rejected by UWSCG.
- 17.** The Contractor issued a new claim on 18th of June that hasn't been approved by the UWSCG as yet. The final extension day will be agreed during the next reporting period and presented in the next Semi-annual EMR, July-December 2021.
- 18. Construction of Waste Water Treatment Plants in Gudauri (GUD-03).** The Proposed project originally envisaged construction of 5 Waste Water Treatment Plants with different sizes but using the same technological process:
- New Gudauri. The new development in the north of Gudauri (ab. 750 m<sup>3</sup>/day) and Gudauri Heights (350 m<sup>3</sup>/day).
  - Upper and Central Gudauri: Located at the same site that the old WWTP, near the church (estimated up to 2000 m<sup>3</sup>/day).
  - Gudauri Downtown. In the head of the big plot of the plateau, down the downtown. (ab. 350 m<sup>3</sup>/day).
  - Plateau-Lower Gudauri. At the end of the plateau for the new development (ab. 750 m<sup>3</sup>/day).
  - Seturebi. One plant to treat the water in Seturebi village (ab. 350 m<sup>3</sup>/day).

19. The Contract was signed on June 3, 2019 with “China Nuclear Industry 23 Construction Co.” LTD (CNI23). The initial date of completion of the GUD-03 sub-project was April 2021. The deadline for implementation of GUD-03 subproject will be extended until December 2021.

## 2.2 Project Contracts and Management

20. 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 Protection and Agriculture (MoEPA).

21. 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 has an Environmental Specialist who is responsible for management of the environmental aspects of USIIP.

22. 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;
- (v) 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

23. The SC includes a full time Environmental Specialist to assist the IPMO supervise and monitor implementation of the EMP during construction.

24. The Contractor also appoints 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

25. Department of Environmental Protection and Permits of UWSCG work together with IPMO on addressing the Environmental Safeguard issues of USIIP. More detailed description of implementation arrangements; responsibilities and staffing are provided in the **Table 1** below.

**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)
1	<b>Environmental planning and management Contractors Environmental Management Plan (site-specific EMP)</b>	Prepare Specific EMP (SEMP) with supplemented Topic Specific EMPs at pre-construction stage based on IEE/EMP Implement SEMPs approved by IPMO.	Review and endorse the SEMPs; Monitor implementation of SEMPs 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	<b>Changes in design</b>	Provide details of design changes to CSC required to update IEE/EIA, or SEMPs; Implement updated SEMPs.	Approve the design change to be submitted to IPMO; Make environmental assessment of the change and update the IEE and/or SEMPs.	Review the updated IEE and/or SEMPs and send it for clearance to ADB	Liaise with CSC in preparing updated IEE and/or SEMPs; Upload the approved IEE/SEMP provided by IPMO to UWSCG website for Public Disclosure.
3	<b>Unanticipated impacts</b>	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 SEMPs	Review the updated IEE and/or SEMPs and send it for clearance to ADB	Liaise with CSC in preparing updated IEE and/or SEMPs



#	Millstones/Actions	Contractor (Environmental Specialist)	Construction Supervision Consultant (Environmental Specialist)	IPMO (Environmental Specialist)	Environmental Protection and Permits Department (Environmental Specialist)
4	<b>Reporting</b>	Prepare monthly environmental monitoring reports and send it to CSC and IPMO	<ol style="list-style-type: none"> <li>1. Prepare inputs to environmental part of quarterly construction progress reports;</li> <li>2. Prepare inputs to semi-annual environmental monitoring report (SAEMR) to be submitted to IPMO for further review, comments and improvement.</li> <li>3. Conduct Post-Construction Final Environmental Audit and prepare final environmental audit report.</li> </ol>	<ol style="list-style-type: none"> <li>1. Finalize SAEMRs (and Final EMRs upon project completion), send it to ADB and address potential ADB's comments until SAEMR disclosure;</li> <li>2. 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	<b>Permits and clearances</b>	NA	NA	NA	Obtaining environmental permits and clearances
6	<b>Non-compliances</b>	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	<b>Public consultations</b>	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	<b>Grievance Redress Mechanism</b>	Project site Focal person to record environmental grievances in the logbook and follow up with UWSCG established practice for grievance redress	<ol style="list-style-type: none"> <li>1. Ensure that grievances, if any, are being properly documented and addressed timely and effectively.</li> <li>2. 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	<b>Trainings</b>	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

26. During the reporting period, in May 2021, Mr. Alexander Tevdoradze was appointed a new director of the UWSCG.
27. A list of main organizations involved in the USIIP/T3 and relating to environmental safeguards is presented in Table 2 below.

**Table 2: List of Main Organizations under USIIP/T3**

Type of project participant	Name of Agency/Company	Environmental Staff	Name and contact details
Lender	Asian Development Bank	Country Environmental Focal	Ninette R. Pajarillaga E-mail: <a href="mailto:npajarillaga@adb.org">npajarillaga@adb.org</a>
		Associate Safeguards Officer Georgia Resident Mission Asian Development Bank	Nino Nadashvili +995 595 070442 <a href="mailto:nnadashvili@adb.org">nnadashvili@adb.org</a>
		ADB RETA International Environmental Consultant	Keti Dgebuadze +995 577232937 <a href="mailto:ketdgeb@yahoo.com">ketdgeb@yahoo.com</a> <a href="mailto:kdgebuadze.consultant@adb.org">kdgebuadze.consultant@adb.org</a>
Borrower	UWSCG	UWSCG, Department of Environmental Protection and Permits, Head	Ms. Maka Goderdzishvili Tel: +995 599 229925 E-mail: <a href="mailto:m.goderdzishvili@water.gov.ge">m.goderdzishvili@water.gov.ge</a>
		UWSCG/IPMO Department of Projects Management, Head	Ms. Ana Onashvili Tel: +995 599 692090 E-mail: <a href="mailto:ana.onashvili@water.gov.ge">ana.onashvili@water.gov.ge</a>

Type of project participant	Name of Agency/Company	Environmental Staff	Name and contact details
Borrower	UWSCG/USIIP/T3	Environmental Specialist	Ms. Ketevan Chomakhidze Tel: +995 577 380309 E-mail: <a href="mailto:Chomakhidzek@yahoo.com">Chomakhidzek@yahoo.com</a>
Supervision Consultant	A Consortium of Consulting Firm led by Eptisa Servicios de Ingenieria S.L. (Spain) in association with SAFEGE (Belgium) and JSC Georgian Water Project (Georgia)	Environmental Specialist:	Mr. Irakli Legashvili Tel: +995 577 177016 E-mail: <a href="mailto:chem_ira@yahoo.com">chem_ira@yahoo.com</a>
Contractor URE-02	JV of Ludwig Pfeiffer Hoch-und Tiefbau GmbH and Co.KG ProtechnoSrl (Germany) / Aritim (Turkey)	Environmental H&S Specialist	Mr.Nikoloz Meparidze Tel: +995 599 346821 E-mail: <a href="mailto:niko@telenet.ge">niko@telenet.ge</a>
Contractor URE-01	JV of Peri Ltd (Georgia) Leading Partner and Slon LLC (Azerbaijan)	Environmental H&S Specialist	Mr. Levan Asabashvili Tel: +995 599 962 693 Email: <a href="mailto:levani.asabashvili@mail.ru">levani.asabashvili@mail.ru</a>
Contractor KUT-01	SMK Ulusal Insaat Ve Ticaret A.S. (Turkey)	Environmental Specialist	Ms. Natia Babukhadia E-mail: <a href="mailto:natiiibab@gmail.com">natiiibab@gmail.com</a> Tel: +995 595 150444

Type of project participant	Name of Agency/Company	Environmental Staff	Name and contact details
		H&S Specialist	Mr. Beso Balanchivadze E-mail: <a href="mailto:besobal84@gmail.com">besobal84@gmail.com</a> Tel: +574 188 653
Contractor ABA-01	AS Inshaat-N, LLC (Azerbaijan)	Environmental H&S Specialist	Mr. Nodar Usupishvili E-mail <a href="mailto:n.usupashvili@gmail.com">n.usupashvili@gmail.com</a> Tel: +995 577 68 16 71
Contractor GUD-03	“China Nuclear Industry 23 Construction Co.” LTD (CNI23)	Environmental H&S Specialist	Mr. Aleksandre (Sasha) Mchedlishvili E-mail <a href="mailto:alexandermchedlishvili1@gmail.com">alexandermchedlishvili1@gmail.com</a> Tel: +995 574 02 77 33

## 2.3 Project Activities during Current Reporting Period

28. During the reporting period, construction work was carried out only under ABA-01 and GUD-03 sub-projects and therefore only these projects are reported in this semi-annual EMR. Contractors under ABA-01 and GUD-03 sub-projects have intensified all activities to improve the progress of the works on sites. The SC gave processed frequent instructions to the Contractor for the planning and outstanding documents preparation which shall ensure steady improvement of the works progress.

### 2.3.1 Project Activities during the Reporting Period

29. Progress of construction works under ABA-01 sub-project is presented in the table 3 below.

**Table 3: Progress of construction works, January-June 2021, ABA-01**

ABA-01	Total	January-June
Earthworks	99%	5%
Pipes	95%	7%
Manholes and Chambers	100%	25%
Surface reinstatement	0%	0%

30. Construction progress under GUD-03 sub-project is presented in the table 4 below.

**Table 4: Progress of construction works, January-June 2021, GUD-03**

GUD-03	Total	January-June
Plant and Mandatory Spare Parts Supplied from Abroad	0%	0%
Plant and Mandatory Spare Parts Supplied from within the Employer's Country	0%	0%
Design	23%	23%
Installation and other Services	4%	1%

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

31. During the reporting period January-June 2021, there were no changes to the agreed project design under USIIP / T3.

#### **2.5 Description of Any Changes to Agreed Construction methods**

32. During the reporting period January-June 2021, there were no changes to the agreed construction methods under USIIP / T3.

## 3. ENVIRONMENTAL SAFEGUARD ACTIVITIES


### 3.1 General Description of Environmental Safeguard Activities

33. Individual and joint on-site monitoring activities were conducted by Environmental Monitoring Specialist of SC and Environmental Specialist of USIIP during the reporting period under ABA-01 and GUD-03 sub-projects, since all other subprojects are already completed under USIIP/T3. Due to weather conditions in Gudauri, construction work on the GUD-03 subproject: Construction of wastewater treatment plants in Gudauri began only in May 2021, therefore, in the reporting period, monitoring activities were carried out only in June 2021.
34. Due to the COVID-19 outbreak in March 2020, 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) Caused by Novel Coronavirus (SARS-CoV-2) which applies to all sectors of economic activity.
35. The General Guideline for COVID-19 was also developed by the Government of Georgia specifically for the construction sector (Please see Annex C of this report).
36. Additional measures were carried out by Supervision Company EPTISA based on the requirements of the UWSCG and Emergency Management Plan of COVID 19 was developed for construction activities carried out under USIIP -T3 (please see Annex D). All EH&S documents, including Health and Safety Plans, as well as Site-Specific Environmental Management Plans were updated by contractors under USIIP/T3.
37. Environmental Monitoring Specialist hired under the ABA-01 sub-project by contractor Mr. Nodar Usupishvili conducted the day-to-day monitoring of the construction sites, developed the monthly monitoring reports and submitted to SC/Eptisa.
38. Environmental Monitoring Specialist hired under the GUD-03 sub-project by contractor Mr. Mr. Aleksandre (Sasha) Mchedlishvili conducted the day-to-day monitoring of the construction sites, developed the monthly monitoring reports and submitted to SC/Eptisa.
39. Environmental Monitoring Specialist of Eptisa, Mr. Irakli Legashvili conducted monthly monitoring of project sites under T3 and developed Non-compliance Notices were required. He also developed quarterly environmental monitoring reports based on the monthly reports submitted by Contractor and environmental site inspections and submit to UWSCG.
40. Environmental Specialist of USIIP Ms. Kate Chomakhidze performed monitoring of contractor's performance in accordance with the requirements of approved IEE/EMPs, SEMP, and other environmental commitments of the contractor. USIIP/ES developed Semi-Annual Environmental Monitoring reports and submitted to ADB based on the quarterly reports prepared by SC and monitoring results.

### 3.2 Site Inspections/Audits

41. Inspection and monitoring of construction sites under ABA-01 project was conducted by ESS of USIIP and Eptisa. The schedule of Joint inspection and summary of audits carried out under ABA-01 sub-projects is provided in the Table 5 below.

**Table 5. Summary of site inspections/audits**


Date of visit	Name of Company Name of Contract	Auditors name	Purpose of audit	Summary of any significant findings	Cross reference to Audit report	Implementation progress
Continuously during reporting period (January-June 2021)	ABA-01 AS Inshaat–N, LLC (Azerbaijan)	Nodar Usupashvili Environmental Specialist of contractor	Day to day monitoring of sites  Compliance with Environmental and HES requirements	Environmental, Health and Safety issues on construction sites  Regular cleaning of the construction site  All photo-documentations are presented in Annex A and Annex B of this report.	Weekly Monitoring Checklists	Completed
May 2021		Environmental monitoring specialists of SC/EPTISA Mr.Irakli Legashvili  Nodar Usupashvili Environmental Specialist of contractor		Workers always should use complete PPE.  Safety norms during working at height (ladder safety norms) should be provided, please see photo No1 below  Photo No1  	Verbal Instruction were given to contractor to immediately improve the situation.	Completed  Completed






Date of visit	Name of Company Name of Contract	Auditors name	Purpose of audit	Summary of any significant findings	Cross reference to Audit report	Implementation progress
				Site internally should be arranged properly and cleaned regularly  All construction materials should be properly segregated and stored adequately		Completed  Completed
Continuously during reporting period (January-June 2021)	GUD-03 "China Nuclear Industry 23 Construction Co." LTD (CNI23)	Mr. Aleksandre (Sasha) Mchedlishvili  Environmental Specialist of contractor	Day to day monitoring of sites  Compliance with Environmental and HES requirements	Environmental, Health and Safety issues on construction sites  Regular cleaning of the construction site  All photo-documentations are presented in Annex A and Annex B of this report.	Weekly Monitoring Checklists	Completed
4 June 2021		Head, department of Environmental Protection and Permits (DEPP) of UWSCG, Ms.Maka Goderdzishvili  Senior Specialist,	Monthly monitoring of sites	Construction site should be properly fenced from all sides and equipped with lockable gate  Proper warning and safety signs should be provided at the entrance gate and perimeter of the construction territory	Verbal Instruction were given to contractor to immediately improve the situation  Non-Compliance Notice issued	Completed  Not completed yet, as the deadline for revision is July 2021, improved photos will be presented in the






Date of visit	Name of Company Name of Contract	Auditors name	Purpose of audit	Summary of any significant findings	Cross reference to Audit report	Implementation progress
				<p>There are areas with a large amount of concrete mixed with the soil in the construction area. Excess concrete should be cleaned and removed immediately, please see photo No3 below Photo No3</p>  <p>There is no drip trays arraigned at sites, the use of integral drip trays for generators, tanks and other fixed plant is mandatory throughout the project, please see photo No4 below Photo No4</p>		Completed

Date of visit	Name of Company Name of Contract	Auditors name	Purpose of audit	Summary of any significant findings	Cross reference to Audit report	Implementation progress
				 <p data-bbox="1014 711 1344 959">Cable should be relocated to avoid any damages on users of power source; Unsafe connection to the power socket should be immediately improved</p>		Completed
7 June 2021		<p data-bbox="548 1000 751 1094">Mr. Aleksandre (Sasha) Mchedlishvili</p> <p data-bbox="548 1117 751 1211">Environmental Specialist of contractor</p> <p data-bbox="548 1250 751 1377">Environmental monitoring specialists of SC/EPTISA</p>	Regular monitoring of construction sites	<p data-bbox="1014 1000 1381 1227">Construction site should be properly fenced from all sides and equipped with lockable gate Please see photos of sites in ANNEX B and below Photo No1</p> <p data-bbox="1014 1365 1161 1393"><b>Photo No1</b></p>	<p data-bbox="1409 1000 1612 1227">Verbal Instruction were given to contractor to immediately improve the situation</p> <p data-bbox="1409 1250 1591 1344">Non-Compliance Notice issued</p>	Partially completed, fencing is already done gate is under construction

Date of visit	Name of Company Name of Contract	Auditors name	Purpose of audit	Summary of any significant findings	Cross reference to Audit report	Implementation progress
		Mr.Irakli Legashvili		 <p>Top Soil should be stored properly, better managed (height 2-3 meter, slope 45 degree), please see photo No2 below</p> <p>Photo No2</p>  <p>Parking area at the construction site should be arranged by relevant sign</p>	<p>(Please see Annex C)</p> <p>Photo-materials are presented in (Annex B)</p>	<p>Not completed yet, as the deadline for revision is July 2021, improved photos will be presented in the next semi-annual EMR, July-December 2021.</p>

Date of visit	Name of Company Name of Contract	Auditors name	Purpose of audit	Summary of any significant findings	Cross reference to Audit report	Implementation progress
				<p>Safety norms during working at height (ladder safety norms) should be provided, please see photo No3 below</p> <p><b>Photo No3</b></p> 		Completed
				<p>Construction territory should be lighted adequately</p> <p>Fuel and lubricants spill elimination items (sand, sawdust, special containers) at the construction site</p>		Completed
				<p>Household Waste container with relevant indication sign should be installed at the construction area</p>		Completed
				<p>Hazardous Waste container with relevant indication sign should be installed at the</p>		Completed





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

42. Several (two) Non-Conformances have been observed during the site visits under ABA-01 sub-project. The contractors were always informed on the detected non-conformances and were demanded to improve on the deadline set and send photos of improvements made together with the corrective action plans. Environmental team of EPTISA and UWSCG/USIIP monitored the improvements during the next monitoring visits.
43. A summary of the identified environmental issues under ABA-01 sub-project for January-June 2021 is presented below.

**Table 6: Summary Table ABA-01**

<b>Total Number of Issues for Project</b>	<b>2</b>
<b>Issues Opened This Reporting Period</b>	<b>0</b>
<b>Issues Closed This Reporting Period</b>	<b>2</b>
<b>Percentage Closed</b>	<b>100%</b>

44. Several (19) Non-Conformances have been observed during the site visits under GUD-03 sub-project. The contractors were always informed on the detected non-conformances and were demanded to improve on the deadline set and send photos of improvements made together with the corrective action plans. Environmental team of EPTISA and UWSCG/USIIP monitored the improvements during the next monitoring visits. All Non-conformance Notices issued during the reporting period is presented in ANNEX C of this Semi-Annual EMR.
45. A summary of the identified environmental issues under GUD-03 sub-project for January-June 2021 is presented below.

**Table 7: Summary Table GUD-03**

<b>Total Number of Issues for Project</b>	<b>19</b>
<b>Issues Opened This Reporting Period</b>	<b>2</b>
<b>Issues Closed This Reporting Period</b>	<b>17</b>
<b>Percentage Closed</b>	<b>89%</b>

46. As it is presented in table 7 above, two issues are still opened under GUD-03 sub-project, which will be improved during the first week of July 2021 and improved photos of sites will be presented in the next Semi-annual EMR, July-December 2021, these issue are as following:  
(i) Proper warning and safety signs should be provided at the entrance gate of the construction territory of WWTP #4; (ii) Top Soil should be stored properly, better managed.

### 3.4 Trends

47. To identify trends in environmental issues information from previous Semi-Annual EMR (January-June 2021) was used. The summary of the issues is provided in the Table 8 below.

**Table 8: Summary of identified trends in environmental issues**

<b>Semi-Annual EMR No</b>	<b>Total No of Issues</b>	<b>% issues Closed</b>	<b>% issues closed late</b>
July-December 2020	22	77%	23%
January-June 2021	21	95%	5%

48. All major Non-Conformances under USIIP/T3 during the reporting period are provided in an Annex C of this report. All EH&S issues, 5% of which is still opened under GUD-03 sub-project are presented in para 43 above.
49. Recommendations to address environmental issues under GUD-03 sub-project is presented in table 15 below. Deadlines for improvement is indicated mid-July 2021. All improvements will be implemented within the Q3 of 2021 and relevant photo-documentation will be presented in the next SAEMR, July-December 2021.

### **3.5 Unanticipated Environmental Impacts or Risks**

50. 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 SEMP by the contractor, developing emergency management plan by SC, etc. More details are provided in paragraphs 30-34 above.

## 4. RESULTS OF ENVIRONMENTAL MONITORING

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

51. During the reporting period Environmental measurements of Noise level and ambient air Quality were carried out by contractor under Kut-01 and Ure-01 projects.
52. Noise and air pollution standards defined by IFC/WHO 1999, are presented in the Table 9 and 10 below.

**Table 9: Noise Level Guidelines**

Noise	dBA		dBA	
	National Regulations		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

53. Air pollution standards by IFC/WHO 1999, are presented in the Table 10 below.

**Table 10: Air pollution Guidelines**

Contaminants	IFC/WHO Guideline Value (Limit) mg/m <sup>3</sup> )
1	2
Inorganic dust	(*IFC does not have a standard for "inorganic dust". Instead IFC applies standards for PM2.5 and PM10). 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

54. During the reporting period, the contractor did not provide any measurement data under ABA-01 sub-project, since construction activities included only a small amount of earthworks and none of the activities under the sub-project had a potential to generate significant noise and air pollution, there were no sensitive receptors in the proximity of the construction sites (approximately 1km) as well. Also construction activities did not involve high noise/vibration generating activities like pile-driving or rock cutting. Notwithstanding the above, ES of USIIP asked SC to issue a non-compliance notice to the contractor to ensure that environmental quality measurements are carried out during the construction works and provide the measurement data to UWSCG.
55. Environmental quality measurements of noise level and ambient air quality under GUD-03 sub-project were conducted by contractor on 24 June 2021. The next monitoring measurements will be conducted in September 2021 and results will be reflected in the next Semi-annual EMR, July-December 2021.
56. Environmental quality measurements of Nitrogen and sulfur dioxide, carbon monoxide and total hydrocarbon under GUD-03 are provided in the table 11 below.

**Table 11: Environmental Quality Measurements, GUD-03 (Air pollution)**

#	Measurement Point		Measurement Results mg/m3			
	Location	Coordinates	Nitrogen Dioxide	Sulfur dioxide	Carbon monoxide	Total Hydrocarbo
1						
2	Gudaauri WWTP #3	X 457715.605 Y 4700127.663	0.004	<0.01	0.19	<0.1
3	Gudaauri WWTP #4	X 457799.357 Y 4699477.964	0.006	<0.01	0.57	<0.1

57. Environmental quality measurements of Dust air pollution, noise and vibration measurements under GUD-03 are provided in the table 12 below.

**Table 12: Environmental Quality Measurements, GUD-03 (Dust, Noise, Vibration)**

#	Measurement point		Measurement results			
	Location	Coordinates	Noise Amax dBA	Vibro speed	Vibro acceleration	dust mg/ m3
1						

#	Measurement point		Measurement results							
				mm/s	db	2 m/s <sup>2</sup>	db	pm2.5	pm10	total
2	Gudauri, treatment plant N 3	X 457715.605 Y 470127.563								
3	Gudauri, treatment plant N 4	X 457799.357 Y 4699477.964	72.8	0.1	64	0.22	103	0.027	0.038	0.042

58. Environmental quality measurements of noise level from different distances from noise sources are provided in the table 12 below.

**Table 12: Environmental Quality Measurements, GUD-03 (Noise level from different distances from noise sources)**

#	Location	Coordinates	Distance from noise source, m	Calculation level of the noise Average value - dBA	Calculation level of the noise Maximum value - dBA
1	Gudauri WWTP No3	X 457715.605 Y4700127.563	10	75	85
			20	71	81
2			40	64	74
3			80	63	73
4			160	58	68
			320	48	58

59. According to data received in June 2021 under GUD-03 sub-projects noise level in some cases exceeds the standards of the National Regulations and World Health Organization

(IFC/WHO),1999 and therefore additional mitigation measures which are presented in the table 15 below are required (please see IFC/WHO standards for Noise and Air pollution in Tables 9 and 10 above). It should be noted also that measurements carried out at construction sites, were temporary and conducted during the daytime from 13:15 pm to 16:45 pm and no complaints were received from the local population about the noise during the reporting period. The distance from the construction sites to the nearest residential houses is more about 500 m.

## 4.2 Trends

60. All major Non-Conformances under USIIP/T3 during the reporting period are provided in an Annex C of this report. All EH&S issues, under ABA-01 and GUD-03 sub-project are presented in table 5 above. Summary of identified issues which needs improvement under ABA-01 and GUD-03 sub-projects are presented in the Table 15 below

## 4.3 Summary of Monitoring Outcomes

61. Contractor is requested to carry out Environmental Quality Measurements of noise and air pollution under ABA-01 sub-project in the third quarter of 2021 and submit measurement data to SC and UWSCG.

## 4.4 Material Resources Utilisation

### 4.4.1 Current Period

62. The contractor did not provide any information on the material resources utilization under the ABA-01 subproject, despite the fact that the contractor was strictly requested to provide this information. UWSCG ask SC to issue Non-Compliance Note to contractor to collect this data for the next reporting period, which will be reflected in the Semi-annual EMR of July-December 2021.

### GUD-03

63. The amount of the electricity and water used by the CC/“China Nuclear Industry 23 construction co.” during the reporting period under GUD-03 sub-project is provided in the table below.

**Table 13: Material Resources Utilization under GUD-03 Sub-project, January-June 2021**

N	Utilized Resources	Monthly	Measurement
1	Consumption of Water	52	M3
2	Electricity	21384	kwt

### 4.4.2 Cumulative Resource Utilisation

N/A

## 4.5 Waste Management (ABA-01)

### 4.5.1 Current Period

64. At the construction sites under ABA-01 sub-project, there are mainly produced household, construction (inert, surplus soil) and hazardous waste. Mainly household waste is collected in municipal containers which are served by the local cleaning service. Contractors always have separate containers for household and hazardous waste with proper labeling at the construction site.
65. The construction waste that is allocated at the construction site is removed for its final disposal that is managed by formal agreement with local municipality.
66. The local municipality is responsible for the disposal of household waste under ABA-01 sub-projects as well.
67. At the construction sites under GUD-03 sub-project, there are mainly produced household, construction (inert, surplus soil) and hazardous waste. Mainly household waste is collected in municipal containers which are served by the local cleaning service. Contractors always have separate containers for household and hazardous waste with proper labeling at the construction site.
68. The construction waste that is allocated at the construction site is removed for its final disposal that is managed by formal agreement with local municipality.
69. The local municipality is responsible for the disposal of household waste under GUD-03 sub-projects as well.
70. The amount of the waste generated by CC/“China Nuclear Industry 23 construction co.” during the reporting period under GUD-03 sub-project is provided in the table 14 below.

**Table 14: Amount of Waste Generated under GUD-03 Sub-project, January-June 2021**

N	Waste management		Measurement
3	Municipal Waste	32	M3

#### 4.5.2 Cumulative Waste Generation

N/A

#### 4.6 Health and Safety

##### 4.6.1 Community Health and Safety

71. No community incidents have been reported under ABA-01 and GUD-03 sub-projects during the reporting period.
72. Relevant measures are undertaken for COVID-19 prevention at construction sites, more detailed information is provided in the Paragraphs 30-34 above.

## 4.6.2 Worker Safety and Health

### ABA-01

73. Environmental H&S Manager of ABA-01 project Mr. Nodar Usupashvili was performing every day monitoring, induction and supervision of ongoing works according to HSE standards and by requirements of ADB/UWSCG/EPTISA and kept H&S incidents/accidents/Near Misses log book.

74. Health & safety and environment issues which were covered during the reporting period are as follows:

- PPE;
- Ground works;
- Manual works;
- Reinforcement;

75. No workers incidents have been reported during reporting period under ABA-01 sub-project.

### GUD-03

76. Environmental H&S Manager of GUD-03 sub-project Mr. Aleksandre (Sasha) Mchedlishvili Performed every day monitoring, induction and supervision of ongoing works according to HSE standards and by requirements of ADB/UWSCG/EPTISA and kept H&S incidents/accidents/Near Misses log book.

77. Health & safety and environment issues which were covered during the reporting period are as follows:

- PPE;
- Working on height;
- Ground works;
- Manual works

78. Near Missis within the framework of the GUD-03 sub-project included work at height without protective equipment and proper disposal of construction materials.

79. Non-compliance notice have been issued by SC/Eptisa and contractor improved the situation within the propose deadline. All near missis were improved by the contractor during the reporting period and no further actions are required.

## 4.7 Training

80. Routine personnel trainings and toolbox talks happen by the construction companies almost on daily basis under ABA-01 and GUD-03 sub-projects. SC also provides routine instructions and verbal trainings for Construction Company environmental and H&S officers.



## 5. FUNCTIONING OF THE SEMP

### 5.1. SEMP Review

- 81.** During the reporting period, the Site-Specific Environmental Management Plan was updated under GUD-03 subproject due to changes in the project design on November 16, 2020.
- 82.** The following SSEMPs were prepared by contractor, within the framework of URE-01, URE-02, KUT-01, ABA-01 and GUD-03 projects during the previous reporting periods:

#### **GUD-03**

- Location Specific EMP for Construction of Gudauri WWTPs (September 2019).

#### **URE-01:**

- SSEMPs for Ureki Well Fields (May 2016)
- Reservoir#1 (November 2016)
- Water Supply Pumping Station (November 2016)
- Reservoir #2 (Laituri Reservoir) (August 2018);

#### **URE-02:**

- SSEMP for Ureki Waste Water Treatment Plant (November 2015)

#### **KUT-01**

- SSEMP for Godogani Reservoir (August 2016)
- SSEMP Mukhnari Reservoirs (March 2016)
- SSEMP Aqueduct River Crossing (December 2019)
- SSEMP Partskanakanebi Chlorine Station (January 2020)

#### **ABA-01**

- SSEMP for Abasha Service Center (February 2020)

- 83.** All SSEMPs under GUD-03, KUT-01, URE-01, URE-02 and ABA-01 projects were prepared by Contractor, endorsed by SC and approved by UWSCG and reviewed/commented by the RETA International Environmental Consultant of ADB under RETA 8663 - Ms. Ketii Dgebuadze.
- 84.** All of the SSEMPs listed above are effective, mitigation measures are still relevant, no changes are required.

## 6. GOOD PRACTICE AND OPPORTUNITY FOR IMPROVEMENT

### 6.1. Good Practice

85. 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/T3 sub-projects.

### 6.2 Opportunities for Improvement

86. 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 continued to avoid non-conformances and improve current situations. All non-conformances addressed will be reflected in the next SAEMR, July-December 2021.

## 7. SUMMARY AND RECOMMENDATIONS

### 7.1 Summary

87. Individual and joint on-site monitoring activities were conducted by Environmental Monitoring Specialist of SC and Environmental Specialist of USIIP on a regular basis.
88. Due to the outbreak of the new Coronavirus - COVID-19 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) Caused by Novel Coronavirus (SARS-CoV-2) which applies to all sectors of economic activity.
89. The General Guideline for COVID-19 was also developed by the Government of Georgia specifically for the construction sector (please see annex D).
90. Additional measure were carried out by Supervision Company EPTISA based on the requirements of the UWSCG and Emergency Management Plan of COVID 19 was developed for construction activities carried out under USIIP/T1-T3 (please see Annex E).
91. The monitoring activities included monitoring of compliance of construction activities to the IEE/EMP and SEMP requirements under ABA-01 and GUD-03 sub-projects.
92. Environmental Specialist of USIIP Ms. Kate Chomakhidze performed monitoring of contractor's performance in accordance with the requirements of approved IEE/EMPs, SEMP's, and other environmental commitments of the contractor. USIIP/ES developed Semi-annual monitoring reports and submitted to ADB based on the quarterly reports prepared by SC and monitoring results.
93. Two Non-Conformance Notices have been issued to the contractor by the environmental specialist of SC and USIIP under GUD-03 sub-project. Mitigation measures have been instructed to CC in order to reduce environmental impacts during the monitoring visits.
94. In accordance with the IEE, and the accompanying Environmental Monitoring Plan (EMP), the Contractor has undertaken parametric measurements and observations on air quality, noise and vibration.
95. Necessary instructions have been given to the Contractor by UWSCG and SC to follow the EMP's and SSEMP's requirements for ABA-01 and GUD-03 sub-projects.

### 7.2 Recommendations

96. During the reporting period, January-June 2021, the T3 of Investment Program was implemented in accordance with the requirements of ADB - SPS 2009 and the National Legislation.
97. More detailed recommendations/next steps for the implementation of T3 during the next reporting period July-December 2021 are provided in the Table 15 below:

**Table 15: Recommendations to Address Environmental Issues under ABA-01 sub-project**

Recommendations ABA-01 and GUD-03 sub-projects	
GUD-03, WWTP #4	
Proper warning and safety signs should be provided at the entrance gate of the construction territory	Instruction are given to contractor to improve the situation and to conduct following mitigation measures by the 15th July 2021
Top Soil should be stored properly, better managed	Instruction are given to contractor to improve the situation and to conduct following mitigation measures by the mid of July 2021
Noise from the construction activities should not cause disruption and nuisance to nearby community and other sensitive receptors (i.e. school, hospitals).	<p>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</p> <p>Noisy construction activities will be avoided during night time</p> <p>All construction equipment and vehicles shall be well maintained, regularly inspected for noise emissions</p> <p>Impose speed limits on construction vehicles to minimize emissions along areas where sensitive receptors are located (i.e. temples, hospitals, schools, houses)</p> <p>Install noise barriers (e.g., panels, curtains, or partitions) to reduce the emission of</p>

Recommendations ABA-01 and GUD-03 sub-projects	
	<p>engine noise</p> <p>Conduct meetings with population and provide information related to schedule of construction activities and noise caused by the project activities.</p>

98. Conduct monitoring of Noise and Ambient Air quality under ABA-01 project near the sensitive receptors of Construction sites in September 2021.

**Table 16: The Specific Plan for Environmental Measurement under ABA-01 Project**

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

99. Conduct monitoring of Noise and Ambient Air quality under GUD-03 project near the sensitive receptors of Construction sites in September 2021.

**Table 17: The Specific Plan for Environmental Measurement under GUD-03 Project**

Parameters	Quarterly measurement
Dust	September 2021
PM <sub>2.5</sub>	September 2021
PM <sub>10</sub>	September 2021
Vibration	September 2021

Carbon monoxide	September 2021
Nitrogen dioxide	September 2021
Sulfur dioxide	September 2021
Noise	September 2021

**100.** Reflect all major findings and recommendations under KUT-01/Phase II sub-project's audit report in the next SAEMR July-December 2021.

**101.** Reflect all major findings and recommendations under URE-01 sub-project's audit report in the next SAEMR July-December 2021.

# ANNEXES

## ANNEX A: ENVIRONMENTAL QIALITY MEASUREMENTS (NOISE LEVEL, AIR POLLUTION) UNDER GUD-03 SUB-PROJECT

ჰაერის აზოტის და გოგირდის დიოქსიდით, ნახშირბადის მონქსიდით და ჯამური

ნახშირწყალბადებით დაბინძურების გაზომვების შედეგები

24.06.2021. 13.15-16.45

Nitrogen and sulfur dioxide, carbon monoxide and total hydrocarbon air pollution

Measurement results on 24.06.2021. 13.15-16.45

#	Measurement Point		Measurement Results mg/m3			
	Location	Coordinates	Nitrogen Dioxide	Sulfur dioxide	Carbon monoxide	Total Hydrocarbo
1						
2	Gudaori WWTP #3	X 457715.605 Y 4700127.663	0.004	<0.01	0.19	<0.1
3	Gudaori WWTP #4	X 457799.357 Y 4699477.964	0.006	<0.01	0.57	<0.1

შპს „ჩაინა ნუკლეარ ინდასტრი 23 კონსტრუქშენ კო“-ს ფილიალი საქართველოში

The Georgia branch of China Nuclear Industry 23 Construction Co. LTD

ჰაერის მტვრით დაბინძურების, ხმაურის და ვიბრაციის გაზომვების შედეგები

24.06.2021. 13.15-16.45

Dust air pollution, noise and vibration measurements on 24.06.2021. 13.15-16.45

#	Measurement point		Measurement results					
	Location	Coordinates	Noise Amax dBA	Vibro speed	Vibro acceleration	dust mg/ m3		
						pm2.5	pm10	total
1								



				mm/s	db	2 m/s <sup>2</sup>	db			
2	Gudaori, treatment plant N 3	X 457715.605 Y 470127.563	43.5	<0.1	<64	<0.1	<102	0.016	0.026	0.033
3	Gudaori, treatment plant N 4	X 457799.357 Y 4699477.964	72.8	0.1	64	0.22	103	0.027	0.038	0.042

#	Location	Coordinates	Distance from noise source, m	Calculation	Calculation
				level of the noise Average value - dBa	level of the noise Maximum value - dBa
1	Gudaori WWTP No3	X 457715.605  Y4700127.563	10	75	85
			20	71	81
2			40	64	74
3			80	63	73
4			160	58	68
			320	48	58

**ANNEX B: PROJECT PHOTOS ABA-01**

**Construction of Abasha Service Center (Photo #1, #2, #3)**

**Photo #1**



**Photo #2**



**Photo #3**



**Measurement of data from an individual water meter in Abasha under ABA-01 project (Photo #4, #5)**

**Photo #4**



**Photo #5**



**PROJECT PHOTOS GUD-03**

**Construction of Gudauri Waste Water Treatment Plant No4 (Photo#6, #7, #8, #9, #10, #11)**

**Photo#6**



**Photo#7**



**Photo #8**



**Photo #9**



**Photo #10**



**Photo #11**



## ANNEX C: NON-CONFORMANCE NOTICE

Non-compliance GUD-03, 4 June 2021

United Water Supply Company of Georgia

04.06.2021

### Non-Compliance Notice

<b>Project:</b> Urban Services Improvement Investment Program, Georgia	<b>Non-compliance Notice Gudauri</b>
<b>Contract No:</b> UWSCG-ICB-GUD-03	
<b>Contractor:</b> China Nuclear Industry 23 Construction Co., Ltd	
<b>Reference:</b> Construction of Wastewater Treatment Plants in Gudauri	
This notice is to advise you, the prime Contractor, on the referenced Contract, of the following notice on environmental measures to be implemented <b>urgently</b> .	

#### NON-COMPLIANCE IN GUDAURI

##### WWTP 4

- Construction site should be properly fenced from all sides and equipped with lockable gate
- Proper warning and safety signs should be provided at the entrance gate and perimeter of the construction territory
- Safety norms during working at height (ladder safety norms) should be provided
- Fuel and lubricants spill elimination items (sand, sawdust, special containers) at the construction site
- Hazardous Waste container with relevant indication sign should be installed at the construction area (at the proper organized place with concrete floor and roofing)
- Site internally should be better arranged, materials should be better segregated/stored and cleaned regularly
- Workers always should use complete PPE. Also special equipment during high altitude works should be always used to avoid accidents (workers damage)
- There are areas with a large amount of concrete mixed with the soil in the construction area. Excess concrete should be cleaned and removed immediately;
- The use of integral drip trays for generators, tanks and other fixed plant is mandatory throughout the project;
- Cable should be relocated to avoid any damages on users of power source;
- Unsafe connection to the power socket should be immediately improved

#### Photos of WWTP 4





All these conditions have to be remedied within seven days (by the 15.06.2021) by the prime Contractor (China Nuclear Industry 23 Construction Co., Ltd)

**Date of site visits 04.06.2021**

Kate Chomakhidze  
UWSCG/USIIP Environmental Consultant

**Non-Compliance Notice**

<b>Project:</b> Urban Services Improvement Investment Program, Georgia	<b>Non-compliance Notice Gudauri</b>
<b>Contract No:</b> UWSCG-ICB-GUD-03	
<b>Contractor:</b> China Nuclear Industry 23 Construction Co., Ltd	
<b>Reference:</b> Construction of Wastewater Treatment Plants in Gudauri	
This notice is to advice you, the prime Contractor, on the referenced Contract, of the following notice on environmental measures to be implemented <b>urgently</b> .	

**NON-COMPLIANCE IN GUDAURI**

**WWTP 4**

- Construction site should be properly fenced from all sides and equipped with lockable gate
- Proper warning and safety signs should be provided at the entrance gate and perimeter of the construction territory
- Safety norms during working at height (ladder safety norms) should be provided
- Fuel and lubricants spill elimination items (sand, sawdust, special containers) at the construction site
- Hazardous Waste container with relevant indication sign should be installed at the construction area (at the proper organized place with concrete floor and roofing)
- Site internally should be better arranged, materials should be better segregated/stored and cleaned regularly
- Workers always should use complete PPE. Also special equipment during high altitude works should be always used to avoid accidents (workers damage)
- There are areas with a large amount of concrete mixed with the soil in the construction area. Excess concrete should be cleaned and removed immediately;
- The use of integral drip trays for generators, tanks and other fixed plant is mandatory throughout the project;
- Cable should be relocated to avoid any damages on users of power source;
- Unsafe connection to the power socket should be immediately improved;

**Photos of WWTP 4**





All these conditions have to be remedied within seven days (by the 14.06.2021) by the prime Contractor (China Nuclear Industry 23 Construction Co., Ltd)

**Date of site visits 04.06.2021**

Irakli Legashvili  
EPTISA - Environment

## 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 OCCUPIED TERRITORIES, LABOUR, HEALTH AND SOCIAL AFFAIRS OF GEORGIA

Labour Conditions Inspection Department  
Create Together Safe Working Environment

Annex №2

### 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 Minister 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 spent 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 - [info@mdpt.gov.ge](mailto:info@mdpt.gov.ge).

For further information, please contact:

☎ 15 05

☎ 116 001

**StopCoV.ge**



*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 natural 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 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 chronic 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 soap 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, personnel 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;

**StepCoV.ge**

**1505**

**116 001**

- 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.



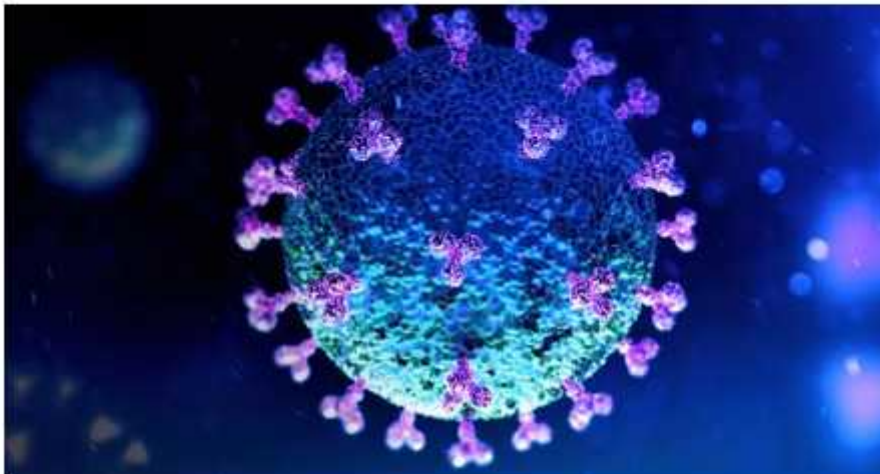
## ANNEX E: COVID 19 EMERGENCY MANAGEMENT PLAN



**Georgia: CONSTRUCTION SUPERVISION CONSULTANCY SERVICES  
FOR URBAN SERVICES IMPROVEMENT INVESTMENT PROJECT (USIIP)**

**Financed by the Asian Development Bank and Government of Georgia**

### **COVID-19 Emergency Management Plan in Construction Sector**



Prepared by: **EPTISA** - Supervision Consultant  
Tbilisi, Georgia

*For: Ministry of Regional Development & Infrastructure (MRDI)  
United Water Supply Company of Georgia (UWSCG)*

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## 1. PREAMBLE

### 1.1 Project Description

1. The overall aim of the project is to improve the health condition of residents by addressing the problems associated with poor water and sewerage services in the towns Kutaisi, Tbilisi. The objective of the project is to solve the most urgent public health problems through the installation of new water systems; new water and sewerage networks; and new treatment facilities. The 'water supply' component aims to augment water production, treatment capacity and maintain water pressure for 24 hours a day.
2. The civil works contracts award sequence is as follow:

Contract Package	Contractor	Start Date	Completion Date
KUT-01	SMK Ulusal Insaat Ve Ticaret	8-Jun-15	28-Mar-20
TBI-01	DAGI Ltd.	01-Mar-16	29-Sep-19
ABA-01	"AS Inshaat-N" LLC	02-Feb-18	14-Mar-20
GUD-03	"China Nuclear Industry 23 Construction Co." LTD	17-Jul-19	06-Jun-22

### 3. Project Management Organisation

- Executing Agency (EA) - Ministry of Regional Development and Infrastructure (MoRDI)
- implementing agency (IA) - United Water Supply Company of Georgia (UWSCG)
- Supervision Consultant – Eptisa
- Contractors – SMK Ulusal Insaat Ve Ticaret; DAGI Ltd; "AS Inshaat-N" LLC; China Nuclear Industry 23 Construction Co. - LTD

### 1.2 Coronavirus

4. Coronaviruses are a large family of viruses that cause respiratory infections. These can range from the common cold to more serious diseases. Coronavirus (COVID-19) is a disease caused by a new form of coronavirus. It was first reported in December 2019 in Wuhan City in China.
5. Health authorities around the world believe the coronavirus (COVID-19) is spread from close contact with an infected person, mostly through face-to-face contact or between members of the same household. The coronavirus (COVID-19) is spread by people with symptoms when

they cough or sneeze. People may also pick up the coronavirus (COVID-19) from surfaces contaminated by a person with the infection.

6. Studies suggest that COVID-19 may persist on surface for a few hours or up to several days. This may vary under different conditions such as the type of surface, temperature or humidity of the environment.
7. A coronavirus infection can cause mild to severe respiratory illness. The most common coronavirus (COVID-19) symptoms reported are:
  - Fever
  - Breathing difficulties and breathlessness
  - Cough
  - Sore throat
  - Fatigue or tiredness.
8. Coronavirus (COVID-19) is most likely to spread from person-to-person through:
  - Close contact with an infected person.
  - Touching objects or surfaces (such as door handles or tables) contaminated by a person with the infection.
9. Close contact means having face-to-face contact for more than 15 minutes with someone who has a confirmed case of coronavirus (COVID-19) – or alternatively sharing a closed space with them for more than two hours.
10. Close contact can happen in many ways, but examples include:
  - Living in the same household or household-like setting (for example, a boarding school or hostel)
  - Direct contact with the body fluids or laboratory specimens of a confirmed case
  - Being in the same room or office for two hours or more
  - Face-to-face contact for more than 15 minutes in some other setting such as in a car or a lift or sitting next to them on public transport.

## **2. PURPOSE**

11. The purpose of these document for the Construction sector, is to:
  - Provide direction to employers and workers
  - Outline the steps to be taken to best provide a safe and healthy environment, and
  - Identify the action available in the event of interruption to building and construction work, as a result of the coronavirus (COVID-19) pandemic.

12. The Document is intended to have application across all sectors of the building and construction sector. Construction sites are diverse and vary in complexity. To allow for flexible interpretation of these guidance, it is recommended that employers apply a risk-based approach and implement reasonably practical controls based on the environment and specific hazards at each construction site.
13. This Document have been developed to maintain the safe operation of construction sites, ensuring the safety of workers.
14. Following of these recommendations these is necessary to minimize and avoid the closure of any construction site.
15. The recommendations apply to all personnel attending on a building and construction site or project, whether management, staff, employees, contractors or service providers.

### **3. CONTROLLING RISKS ON SITE**

16. To assist with providing and maintaining safe operations during coronavirus (COVID-19) the below measures should be implemented to assist in providing a safe and healthy environment at work.

- Screening workers coming to site
- Workplace Mapping
- Physical Distancing
- Hygiene
- Shared Tools, Plant and Equipment
- Cleaning and Disinfecting
- Personnel Hoists
- Personal Protective Equipment
- Common Areas
- Inspections
- Travel
- General Communications
- Other measures
- Vulnerable workers

#### **3.1 Screening workers coming to site**

17. To minimize the risk of transmission of coronavirus (COVID-19) on site, employers must implement a two-phase screening process; phase one being an initial declaration and phase two on going daily screening.

18. Initial declaration is to be conducted by all workers (this includes any person who attends site), including current and new-starters. Each worker must provide a declaration that they to the best of their knowledge:
  - have not been diagnosed with coronavirus (COVID-19) in the last 14 days, or
  - are not in a period of 14 day quarantine as directed by a health professional, or
  - have not been overseas in the last 14 days, or
  - have not been in contact with anyone who has coronavirus (COVID-19), or
  - have not been in contact with anyone who is currently being tested for coronavirus (COVID-19), or
  - do not have anyone in their household who has symptoms consistent with COVID-19.
19. Once the initial declaration has been made by the worker, ongoing screening (phase 2) should be conducted for every worker prior to the start of their shift, asking to the best of their knowledge:
  - have they been overseas in the last 14 days, or
  - have they been in contact with anyone who has coronavirus (COVID-19), or
  - have they been in contact with anyone who is currently being tested for coronavirus (COVID-19), or
  - do they have anyone in their household who has symptoms consistent with COVID-19.
20. If a worker declares any of the above they may be required to self-isolate.
21. Screening should be conducted, whilst maintaining safe distances or over the phone before entering site, on a mobile app, via text message system, or other non-contact methods. It is advisable to have a system in place that limits the sharing of pens/ notebooks/ computers etc.
22. If a worker has recently had close contact with a confirmed case, they need to:
  - self-isolate at home for a period of 14 days and follow the self-isolation Guidelines
  - not attend work
  - contact their employer
  - seek urgent medical attention if they have symptoms consistent with COVID-19
  - not return to work until they have been cleared by a medical practitioner.
23. If a worker is experiencing symptoms consistent with COVID-19 or had close contact with a confirmed case, they must:
  - not attend work
  - contact their employer for further advice and;
  - not return to work until they have been cleared by a medical practitioner.



### 3.2 Workplace Mapping

24. In the event of an employee being confirmed as having COVID-19, those who are potentially affected need to be quickly identified.
25. Employers should implement processes to record the schedule and work locations for workers that enables tracing of those who have come into contact with the confirmed case.
26. The record should include:
  - day and time work was undertaken
  - members of teams that worked together
  - specific work area on the construction site
  - any breaks taken, including time and location
27. Movement between sites, or areas within large sites, should be minimized as much as possible.
28. Where attending multiple sites is necessary (e.g. for HSRs, first aiders, emergency wardens) movement between sites should be recorded in the workplace mapping.

### 3.3 Physical Distancing

29. Physical distancing of at least 1.5-2 meters should be implemented wherever possible. Employers should consider each work task and whether there is a safe alternative way to undertake the work with an increased distance between workers.
  - Mark safe distances in work, transit and break areas (e.g. on floors and walls).
  - Consider different shift patterns to minimize the number of workers onsite (e.g. AM/PM shifts).
  - Stagger start times, breaks and finish times to avoid congestion in high traffic areas and minimize workers coming into contact with each other as they move around the site.
  - Plan for how physical distancing will be maintained during inclement weather (e.g. use of lunch or crib rooms and amenities).
  - Install temporary physical barriers (e.g. fences, screens) between work areas, where appropriate.
30. Where it is not possible to undertake work tasks and maintain physical distancing, other control measures need to be implemented. For example:
  - Minimize the number of worker to worker interactions that need to be completed within 1.5 meters
  - Minimize the number of workers involved in activities that need to occur within 1.5 meters of each other
  - Provide personal protective equipment (PPE) (e.g. gloves, masks, glasses).

31. Where essential work activities need to be undertaken in restricted spaces (e.g. lift shafts, personnel hoists, lifts), the number of workers working in the space should be minimized.

### **3.4 Hygiene**

32. Good hygiene practices and general cleaning helps with minimizing the spread of coronavirus (COVID-19). Employers should review general hygiene requirements and the cleaning regimes in place.

33. Employers should display health information in prominent locations on the construction site such as tea rooms, site offices, toilets, foyers, lifts and site entrances.

34. Every effort must be made by employers to upgrade personal hygiene and minimize worker to worker contact and all workers must co-operate in all necessary measures to achieve these objectives. These measures need to include:

- Promote regular hand washing with soap for at least 20 seconds. Employers must facilitate regular hand washing by providing ease of access/additional facilities where possible. Communicate to all workers where hand sanitizers are located and encourage their regular use.
- Promote good cough etiquette by covering your cough and sneeze, or cough into your elbow or shoulder.
- Avoid touching your nose, eyes or mouth.
- Provide hand sanitizer and/or hand washing facilities with soap in all site entrances and exits hoists, amenities and areas/levels of the site.

35. Employers must ensure that workers have access to appropriate amenities. Employers should review and revise the number and locations of amenities, to reduce movement around the site.

36. Amenities need to include:

- Hand washing facilities (whether permanent or temporary), such as a wash basin, clean running water, soap and paper towels, placed in strategic locations to ensure employees can access them in a timely manner.
- Access to hand sanitizer.
- Rubbish bins with touch-free lids (e.g. foot pedal bins).
- Thorough and regular sanitation.
- Appropriate waste management systems.

### **3.5 Shared tools, plant and equipment**

37. Workers should avoid the shared use of tools, plant and equipment wherever possible. For example, drop saws, drills, grinders, ladders or elevating work platforms should not be used by more than one worker.

38. Where it is not possible to eliminate shared use:

- Provide cleaning products (e.g. alcohol spray or solution) where communal tools, plant and equipment are located.
- Keep cleaning products with tools, plant and equipment as they move around the site.
- Ensure all operators thoroughly wash or sanitize their hands before and after every use.
- Ensure all parts of tools, plant and equipment (e.g. including handles, handrails) are wiped down before and after use.

39. The shared use of phones, desks, offices, computers and other devices should also be avoided. Where this is not possible, these items should be regularly disinfected.

### **3.6 Cleaning and Disinfecting**

40. Cleaning and disinfecting of surfaces is to be conducted using cleaning products as per DHHS Cleaning and Disinfection guidelines to reduce coronavirus (COVID-19) Transmission – the specific guidance is available here:

- Cleaning and disinfection of amenities and meal areas must occur between work group breaks
- Cleaning and disinfection of Personnel Hoists should occur at the end of each hoist operator shift
- Implement regular cleaning and disinfection (minimum of twice daily) to 'Frequently Touched Surfaces', surfaces such as toilets, door handles, stair handrails, light switches, lift buttons, table tops.
- Additional cleaning/disinfecting on-site. There must be an increased frequency of industrial grade cleaning/additional cleaning/disinfecting on sites across all areas including particular emphasis on commonly touched/communal surfaces;

### **3.7 Personnel hoists**

41. Workers using hoists and lifts may be at greater risk of exposure to coronavirus (COVID-19), because they are required to be in close contact with others and potentially contaminated surfaces.

42. Control measures to reduce the risk in personnel hoists should include systems of work, physical distancing, personal hygiene, PPE and cleaning.

43. It is acknowledged that not all hoists and lifts are identical in size or dimension, and have varying weight limits.

44. Where it is not possible to implement physical distancing measures in a personnel hoist, all other available control measures need to be used.

45. Control measures may include:

- Limiting worker movement between levels and floors on site, where it is possible and safe to do so.
- Reviewing which hoists are available for use on site and identifying if additional hoists can be used (for example where a partially occupied building is under construction, consider whether a residential lift be used solely for construction persons).
- Physical distancing of 1.5-2 m and hygiene systems to be followed when waiting for hoist, particularly on floors where worker volumes may increase during peak times (start, break, finish times). For example the ground floor, floors with meal or break out spaces and floors with bathroom amenities.
- Determine how many workers can use a hoist at any time (including hoist operator) taking into consideration the limited duration and additional control measures in these Guidelines.
- Mark out hoist floor, identifying:
  - where workers stand
  - what direction they are to face when in the hoist to avoid face to face contact
  - Sequencing of entering and exiting
- Mark the hoist waiting area at each floor ensuring the physical distancing is maintained
- Regularly communicate and remind workers (e.g. through posters, digital displays):
  - diagram of positioning of workers and sequence of worker entering
  - not to touch walls/doors of the hoist
  - advise the cleaning regime in place
- During peak periods have system in place to limit crowding of workers entering/exiting the work area. For example:
  - developing a schedule for use of the hoist
  - Staggering what floors workers are to use the hoists. Hoist operators may be exposed to additional risk. They should:
    - Be provided with PPE that protects them from worker to worker transmission and from touching contaminated surfaces (e.g. face shield or surgical mask/P2 respirator and glasses).
    - Perform frequent hand washing with soap and water or the application of hand sanitizer positioned within the hoist.
    - Where possible, change hoist operator every two hours into a different role.

### **3.8 Personal Protective Equipment (PPE)**

46. Employers must provide information, instruction and training on the safe use, decontamination and maintenance of any PPE provided.

47. Any PPE provided needs to be practical for the work environment (e.g. allowing the necessary visibility and mobility) and properly decontaminated or disposed of at the end of every shift.
48. Employers should monitor and encourage correct use of PPE, for example providing information on posters and digital screens about:
  - Washing or sanitizing hands before putting PPE on, and putting face protection on before gloves
  - Removing gloves before face protection, washing or sanitizing hands after removing PPE and decontaminating or disposing of used PPE safely.

### **3.9 Common areas**

49. Common areas on sites such as the amenities pose risks, and these are reduced by ensuring the following measures are adopted.
50. The time spent in those areas must be limited so as not to breach time constraints recommended by DHHS.
51. Staggering of meal breaks and separation of work groups to achieve maximum personal space and reduce the number of workers accessing those areas at any one time consistent with the Government requirements.
52. Sanitization must occur between occupation of amenities by different work groups
53. Spread out furniture to ensure physical distancing measures in common areas
54. There must be an increased frequency of industrial grade cleaning/additional cleaning with specific emphasis on cleaning after each meal breaks in those areas
55. Workers electing to minimize amenity access
56. Staggered working hours must be considered on sites with appropriate consultation (consideration must be given to Construction Management Plans, and workers must be given adequate notice of a change in hours).

### **3.10 Inspections**

57. During inspections of the sites everyone should ensure all measures are in place to ensure compliance. Employers and Health and Safety Representatives are encouraged to work together to assist in this important objective.

### **3.11 Travel**

58. Adequate arrangements are to be made by workers to ensure their travel to and from work is conducted safely in accordance with Government advice, and that adequate sanitization facilities are in place for workers upon attending the work site and when returning to the work site during work.
59. Workers should ensure that for transport to and from work that they adhere to the hygiene and cleaning guidance, and the physical distancing

60. Work vehicles that are shared should be regularly cleaned to ensure adequate hygiene and protection.

### **3.12 General Communication**

61. Ensuring everyone is informed is fundamental to managing this pandemic and ensuring the safe operations of construction sites.

62. 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.

63. 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.

64. 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.

65. 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.

### **3.14 Other measures**

66. Construction sites are diverse and vary in complexity, employers must apply a risk-based 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.

### **3.15 Vulnerable workers**

67. 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)

68. Where practical, reasonable action should be taken to minimize vulnerable workers from conducting higher risk roles

#### 4. Summary of recommendations and responsibility

*Table of Summary of recommendations and responsibility*

Activity	Responsible for implementation
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 I. Sakvarelidze National Center for Disease Control and Public Health);	Employer
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
To ensure maximum use of remote work in relation to those employees who can perform work remotely (administrative personnel);	Employer
To put mattings at the entrance of the lounge room / dining room, with the relevant sign of indication;	Employer
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
To place hand sanitizers and the instruction for their proper use in a prominent place;	Employer
To ensure that employees have access to hand sanitizers and know how to use them in accordance with the relevant instructions;	Employer
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
To train the employees on the proper use of personal protective equipment and its subsequent storage / disposal;	Employer
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
Periodically, several times a day ensure natural ventilation of indoor spaces / closets;	Employer
Periodically ensure disinfection of workplaces and frequently used equipment;	Employer
To keep ergonomics in order at the construction site. To ensure the prompt cleaning of workspace and removal of construction waste.	Employer
To ensure placement of closed containers for the disposable napkins and other hygiene waste used by both employees and visitors.	Employer

Follow the rules of hygiene at your workplace;	Employee
Carry out the work process in accordance with the Emergency Action Plan defined by the employer / work safety manager;	Employee
Avoid shaking hands and direct contact with others (touch, etc.) while saluting;	Employee
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
When performing the work, make full use of the personal protective equipment provided by the employer;	Employee
Clean the workplaces and the tools and equipment used during the work process with disinfectants;	Employee
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
Use alcohol-based hand sanitizers in case if you are unable to wash and dry your hands;	Employee
Keep a safe distance (not less than 2 m);	Employee
Cover your mouth with clean napkin or elbow when coughing and sneezing and then throw the used disposable napkin in the trash;	Employee
Avoid touching your eyes, nose, or mouth with your hands.	Employee

**5. Covid-19 informational banners**





<p><b>ՀԱՄԻՆ ԺՆՈՒՄԱՆՈՒՄ</b></p> <p><b>ՔԱՆՈՒՆ ԶՆՆՈՒՄԱՆ ԿԱՐԴԱՆԵՐՆԵՐ ԿՈՐՈՆԱՎԻՐՍ</b></p> <p>Հաստատված քաղաքացիները կարող են օգտագործել Կարճատև ճանապարհորդության արտոնագրերը՝ միայն այն դեպքերում, երբ այդ արտոնագրերը համապատասխանում են հաստատված կարճատև ճանապարհորդության կարգավորումներին:</p> <p>ՀՀ ԿՈՒՄԻՏԵ ԿԱՐԴԱՆԵՐՆԵՐ Վեբ-կայք: <a href="http://www.komites.am">www.komites.am</a> Տեղախոս: 010 522 11 00 010 522 11 00</p>	<p><b>ՀԱՄԻՆ ԺՆՈՒՄԱՆՈՒՄ</b></p> <p><b>ԲՆԱԿԱՆ ԺՈՒՄԱՆՈՒՄԻ ՍՈՑԻԱԼԱԿԱՆ ԿՐԻՏԵՐՆԵՐ ԿՈՐՈՆԱՎԻՐՍ</b></p> <p>Սոցիալական անվտանգությունը պահպանելու համար:</p> <ul style="list-style-type: none"> <li>• Բարձրագույն անվտանգությունը ապահովելու համար:</li> <li>• Կարճ էջերը հարմարելու և կախվածությունը կարճատև դարձնելու համար:</li> <li>• Կարճ էջերը հիմնարկներում հարմարեցնելու:</li> <li>• Կախվածությունը կարճատև դարձնելու համար:</li> <li>• Կախվածությունը կարճատև դարձնելու համար:</li> </ul> <p>ՀՀ ԿՈՒՄԻՏԵ ԿԱՐԴԱՆԵՐՆԵՐ Վեբ-կայք: <a href="http://www.komites.am">www.komites.am</a> Տեղախոս: 010 522 11 00 010 522 11 00</p>	<p><b>ՀԱՄԻՆ ԺՆՈՒՄԱՆՈՒՄ</b></p> <p><b>ԳՆՈՒՄ</b></p> <p>Սահմանափակված քաղաքացիները կարող են օգտագործել Կարճատև ճանապարհորդության արտոնագրերը՝ միայն այն դեպքերում, երբ այդ արտոնագրերը համապատասխանում են հաստատված կարճատև ճանապարհորդության կարգավորումներին:</p> <p>ՀՀ ԿՈՒՄԻՏԵ ԿԱՐԴԱՆԵՐՆԵՐ Վեբ-կայք: <a href="http://www.komites.am">www.komites.am</a> Տեղախոս: 010 522 11 00 010 522 11 00</p>
<p><b>ՀԱՄԻՆ ԺՆՈՒՄԱՆՈՒՄ</b></p> <p><b>ԵՐԱՅԵՐԻՆ ԺՈՒՄԱՆՈՒՄԻ ԿԱՐԴԱՆԵՐՆԵՐ</b></p> <p>Երկրից դուրս գալիս կարող ես օգտագործել Կարճատև ճանապարհորդության արտոնագրերը՝ միայն այն դեպքերում, երբ այդ արտոնագրերը համապատասխանում են հաստատված կարճատև ճանապարհորդության կարգավորումներին:</p> <p>ՀՀ ԿՈՒՄԻՏԵ ԿԱՐԴԱՆԵՐՆԵՐ Վեբ-կայք: <a href="http://www.komites.am">www.komites.am</a> Տեղախոս: 010 522 11 00 010 522 11 00</p>	<p><b>ՀԱՄԻՆ ԺՆՈՒՄԱՆՈՒՄ</b></p> <p><b>ԿՐԻՏԵՐՆԵՐ ԿՈՐՈՆԱՎԻՐՍԻ ԿԱՐԴԱՆԵՐՆԵՐ</b></p> <p>Կարճատև ճանապարհորդության արտոնագրերը կարող ես օգտագործել միայն այն դեպքերում, երբ այդ արտոնագրերը համապատասխանում են հաստատված կարճատև ճանապարհորդության կարգավորումներին:</p> <p>ՀՀ ԿՈՒՄԻՏԵ ԿԱՐԴԱՆԵՐՆԵՐ Վեբ-կայք: <a href="http://www.komites.am">www.komites.am</a> Տեղախոս: 010 522 11 00 010 522 11 00</p>	<p><b>ՀԱՄԻՆ ԺՆՈՒՄԱՆՈՒՄ</b></p> <p><b>ՔԱՆՈՒՆ ԿԱՐԴԱՆԵՐՆԵՐ ԿՈՐՈՆԱՎԻՐՍ</b></p> <ul style="list-style-type: none"> <li>• Կարճատև ճանապարհորդության արտոնագրերը:</li> <li>• Կարճատև ճանապարհորդության արտոնագրերը:</li> <li>• Կարճատև ճանապարհորդության արտոնագրերը:</li> <li>• Կարճատև ճանապարհորդության արտոնագրերը:</li> <li>• Կարճատև ճանապարհորդության արտոնագրերը:</li> </ul> <p>ՀՀ ԿՈՒՄԻՏԵ ԿԱՐԴԱՆԵՐՆԵՐ Վեբ-կայք: <a href="http://www.komites.am">www.komites.am</a> Տեղախոս: 010 522 11 00 010 522 11 00</p>

<p><b>ՀԱՄԻՆ ԺՆՈՒՄԱՆՈՒՄ</b></p> <p><b>ՔԱՆՈՒՆ ԿԱՐԴԱՆԵՐՆԵՐ ԿՈՐՈՆԱՎԻՐՍ</b></p> <p>Կարճատև ճանապարհորդության արտոնագրերը կարող ես օգտագործել միայն այն դեպքերում, երբ այդ արտոնագրերը համապատասխանում են հաստատված կարճատև ճանապարհորդության կարգավորումներին:</p> <p>ՀՀ ԿՈՒՄԻՏԵ ԿԱՐԴԱՆԵՐՆԵՐ Վեբ-կայք: <a href="http://www.komites.am">www.komites.am</a> Տեղախոս: 010 522 11 00 010 522 11 00</p>	<p><b>ՀԱՄԻՆ ԺՆՈՒՄԱՆՈՒՄ</b></p> <p><b>ՔԱՆՈՒՆ ԿԱՐԴԱՆԵՐՆԵՐ ԿՈՐՈՆԱՎԻՐՍ</b></p> <p>Կարճատև ճանապարհորդության արտոնագրերը կարող ես օգտագործել միայն այն դեպքերում, երբ այդ արտոնագրերը համապատասխանում են հաստատված կարճատև ճանապարհորդության կարգավորումներին:</p> <p>ՀՀ ԿՈՒՄԻՏԵ ԿԱՐԴԱՆԵՐՆԵՐ Վեբ-կայք: <a href="http://www.komites.am">www.komites.am</a> Տեղախոս: 010 522 11 00 010 522 11 00</p>	<p><b>ՀԱՄԻՆ ԺՆՈՒՄԱՆՈՒՄ</b></p> <p><b>ՔԱՆՈՒՆ ԿԱՐԴԱՆԵՐՆԵՐ ԿՈՐՈՆԱՎԻՐՍ</b></p> <p>Կարճատև ճանապարհորդության արտոնագրերը կարող ես օգտագործել միայն այն դեպքերում, երբ այդ արտոնագրերը համապատասխանում են հաստատված կարճատև ճանապարհորդության կարգավորումներին:</p> <p>ՀՀ ԿՈՒՄԻՏԵ ԿԱՐԴԱՆԵՐՆԵՐ Վեբ-կայք: <a href="http://www.komites.am">www.komites.am</a> Տեղախոս: 010 522 11 00 010 522 11 00</p>
<p><b>ՀԱՄԻՆ ԺՆՈՒՄԱՆՈՒՄ</b></p> <p><b>ՔԱՆՈՒՆ ԿԱՐԴԱՆԵՐՆԵՐ ԿՈՐՈՆԱՎԻՐՍ</b></p> <p>Կարճատև ճանապարհորդության արտոնագրերը կարող ես օգտագործել միայն այն դեպքերում, երբ այդ արտոնագրերը համապատասխանում են հաստատված կարճատև ճանապարհորդության կարգավորումներին:</p> <p>ՀՀ ԿՈՒՄԻՏԵ ԿԱՐԴԱՆԵՐՆԵՐ Վեբ-կայք: <a href="http://www.komites.am">www.komites.am</a> Տեղախոս: 010 522 11 00 010 522 11 00</p>	<p><b>ՀԱՄԻՆ ԺՆՈՒՄԱՆՈՒՄ</b></p> <p><b>ՔԱՆՈՒՆ ԿԱՐԴԱՆԵՐՆԵՐ ԿՈՐՈՆԱՎԻՐՍ</b></p> <p>Կարճատև ճանապարհորդության արտոնագրերը կարող ես օգտագործել միայն այն դեպքերում, երբ այդ արտոնագրերը համապատասխանում են հաստատված կարճատև ճանապարհորդության կարգավորումներին:</p> <p>ՀՀ ԿՈՒՄԻՏԵ ԿԱՐԴԱՆԵՐՆԵՐ Վեբ-կայք: <a href="http://www.komites.am">www.komites.am</a> Տեղախոս: 010 522 11 00 010 522 11 00</p>	<p><b>ՀԱՄԻՆ ԺՆՈՒՄԱՆՈՒՄ</b></p> <p><b>ՔԱՆՈՒՆ ԿԱՐԴԱՆԵՐՆԵՐ ԿՈՐՈՆԱՎԻՐՍ</b></p> <p>Կարճատև ճանապարհորդության արտոնագրերը կարող ես օգտագործել միայն այն դեպքերում, երբ այդ արտոնագրերը համապատասխանում են հաստատված կարճատև ճանապարհորդության կարգավորումներին:</p> <p>ՀՀ ԿՈՒՄԻՏԵ ԿԱՐԴԱՆԵՐՆԵՐ Վեբ-կայք: <a href="http://www.komites.am">www.komites.am</a> Տեղախոս: 010 522 11 00 010 522 11 00</p>



