

Semi-Annual Environmental Monitoring Report

#13 Semiannual Report

(Reporting Period: January-June 2022)

Project Number: 43405-025

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

(FINANCED BY THE ASIAN DEVELOPMENT BANK)

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First Submission Date:

July 2022

Re-submission Date:

October 2022

ABBREVIATIONS

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

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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 2022.
2. This report is the 13th Semi-annual EMR for the T3 of “Urban Services Improvement Investment Program”.

1.2 Headline Information

3. During the reporting period, construction works were carried out only within the framework of GUD-03 sub-project. Due to weather conditions, construction activities began at the end of May 2022 and therefore this report only describes the activities carried out within this sub-project. All construction works under other USIIP/T3 sub-projects have already been completed. For more detailed information please see paragraphs 8-19 below.
4. There were no pending non-compliances, most of the problems identified during the site visit were eliminated by the contractor within the proposed deadline.

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. Sub-projects 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. **¹Construction 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 m³ x 3,000 m³ and 1 x 1,200 m³); 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 was 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. Project completion date was September 2019. The project is foreseen to serve 35,000 tourists and 5,400 local inhabitants by year 2040.

¹ 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. Supervision Consultant EPTISA conducted Post Construction Environmental Audit and prepared Post Construction Environmental Audit Report under URE-01 sub-project in June 2021.
11. **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 m³/day.
12. 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.
13. The Post-construction Environmental Audit of the URE-02 sub-project was carried out by the Supervision Consultant EPTISA and the corresponding audit report was prepared in June 2019.
14. **Construction and Rehabilitation of Water Supply System in Kutaisi/Phase 2 (KUT-01).** The project envisages construction of Kvitiri 973 m³/h capacity and Mukhrani 660 m³/h capacity pumping stations; Reservoirs - construction of Near East and Mukhrani reservoirs with the capacity of 9,000 m³ (2x4,000+1,000). Distribution network - 332.1 km.
15. 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 was June 8 2018, the contract was completed in July 2020. SC/EPTISA conducted Post construction audit under KUT-01 sub-project in June 2021 and submit Post Construction Audit Report to UWSCG and ADB. Post Construction Audit Report under KUT-01 was prepared by SC/EPTISA in June 2021.
16. **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.
17. 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, 2021 that was rejected by UWSCG.
18. 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 2022.
19. **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 m³/day) and Gudauri Heights (350 m³/day).
 - Upper and Central Gudauri: Located at the same site that the old WWTP, near the church (estimated up to 2000 m³/day).
 - Gudauri Downtown. In the head of the big plot of the plateau, down the downtown. (ab. 350 m³/day).
 - Plateau-Lower Gudauri. At the end of the plateau for the new development (ab. 750 m³/day).
 - Seturebi. One plant to treat the water in Seturebi village (ab. 350 m³/day).
20. 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 was extended until November 2022.

2.2 Project Contracts and Management

- 21.** The main institutions that are involved in implementation of the EMP are 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, Supervision Consultant (SC) the Contractor and to a lesser extent the Ministry of Environment Protection and Agriculture (MoEPA).
- 22.** The Investment Program Management Office (IPMO) under UWSCG, which is the Donors Funded Projects Management Department, is responsible for the day-to-day management of the project, including the implementation of the EMP. IPMO has an Environmental Specialist who is responsible for managing the environmental aspects of the USIIP. The head of the department was also replaced, and Ms.Irina Chikhladze was appointed as Acting Head of the Department instead of Ms.Ana Onashvili.
- 23.** The IPMO Environmental Specialist (Ms.Kate Chomakhidze) 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;
 - (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
- 24.** The SC include a full time Environmental Specialist to assist the IPMO oversee day-to-day implementation of EMPs by contractors, including compliance with all government rules and regulations; Support IPMO in the review and endorsement of contractor’s SSEMP; Conduct inspections on contractor’s implementation of SSEMP and compliance with government rules and regulations; Ensure contractors comply with health and safety requirements per approved SSEMP’s Health and Safety Management Plan; Conduct investigations on grievances/complaints, incidents and accidents; Assist IPMO in addressing any grievances in a timely manner as per the GRM; Monitor corrective actions as required in CAPs, and ensure non-compliances are resolved immediately and are not occurring repeatedly; Prepare recommendations for contractors repeated non-compliances on safeguards and EHS requirements; Submit monthly and quarterly environmental monitoring reports to IPMO.
- 25.** The Contractor also appoint a full time Environmental specialist to be a senior member of the construction management team based on site for the duration of the contract. The ES has 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. Environmental Specialist of contractor is responsible for preparing the Specific Environmental Management Plan (SSEMP) for endorsement by Supervision

Consultant and approval by the UWSCG prior to the Contractor taking possession of the construction site and provide pre-works photo documentation; Ensuring the SSEMP is implemented effectively throughout the construction period; establishing and maintaining site records of: weekly site inspections using checklists based on SSEMP; environmental accidents/incidents including resolution activities; environmental monitoring data; non-compliance notifications issued by the SC; Corrective action plans issued to the SC in response to non-compliance notices; Community relations activities including maintaining complaints register; Routine reporting of SSEMP compliance and community liaison activities; Implement Occupational Health and safety requirements, including COVID-19 prevention measures. Implement site clean-up measures after civil works finalization.

- 26.** 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	Environmental planning and management Contractors Environmental Management Plan (site-specific EMP)	Prepare Specific EMP (SEMP) with supplemented Topic Specific EMPs at pre-construction stage based on IEE/EMP Implement 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	Changes in design	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	Unanticipated impacts	Inform CSC about unanticipated impact and follow the instructions received from IPMO.	Make environmental assessment of the unanticipated impact and update the IEE and/or 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	Reporting	Prepare monthly environmental monitoring reports and send it to CSC and IPMO	<ol style="list-style-type: none"> 1. Prepare inputs to environmental part of quarterly construction progress reports; 2. Prepare inputs to semi-annual environmental monitoring report (SAEMR) to be submitted to IPMO for further review, comments and improvement. 3. Conduct Post-Construction Final Environmental Audit and prepare final environmental audit report. 	<ol style="list-style-type: none"> 1. Finalize SAEMRs (and Final EMRs upon project completion), send it to ADB and address potential ADB's comments until SAEMR disclosure; 2. Provide ENG and GEO final versions of SAEMRs to be uploaded on UWSCG website. 	Upload the approved reports (ENG and GEO) provided by IPMO to UWSCG website for Public Disclosure
5	Permits and clearances	NA	NA	NA	Obtaining environmental permits and clearances
6	Non-compliances	Prepare a corrective action plan (CAP)	Assist contractor in preparing the CAP.	Review and approve the CAP and provide to ADB for review and comments if any.	
7	Public consultations	Participate in public consultations during project implementation	Organize public consultations: inform people about activities and prepare the record of consultations.	Participate in public consultations during project implementation	UWSCG & IPMO host PCs, CSC will present the topics related to environmental issues

#	Millstones/Actions	Contractor (Environmental Specialist)	Construction Supervision Consultant (Environmental Specialist)	IPMO (Environmental Specialist)	Environmental Protection and Permits Department (Environmental Specialist)
8	Grievance Redress Mechanism	Project site Focal person to record environmental grievances in the logbook and follow up with UWSCG established practice for grievance redress	<ol style="list-style-type: none"> 1. Ensure that grievances, if any, are being properly documented and addressed timely and effectively. 2. Assist IPMO to develop consolidated GRM database and consolidation of GRM cases both for ENV and Social safeguards 	In case of need assist IPMO Social/Resettlement Consultant in resolving process of environmental safeguards related complaints; Assist IPMO Social/Resettlement Consultant in GRM database consolidation and data analysis.	UWSCG maintains GRM applicable to all projects. UWSCG will ensure IPMO information on grievances is consolidated into the UWSCG grievances (both - environmental and social) without duplication.
9	Trainings	Attend on-site trainings organized by IPMO and ADB/RETA Consultant	Assist the IPMO in organization of trainings for the Contractors on environmental safeguards requirements.	Organize trainings for the Contractors in coordination with ADB/RETA consultant. Participate in external trainings in environmental management and environmental auditing	Participate in external trainings in environmental management and environmental auditing

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: npajarillaga@adb.org
		Associate Safeguards Officer Georgia Resident Mission Asian Development Bank	Nino Nadashvili +995 595 070442 nnadashvili@adb.org
		ADB RETA International Environmental Consultant	George Kobaladze +995 599 689834 gkobaladze.consultant@adb.org
Borrower	UWSCG	UWSCG, Department of Environmental Protection and Permits, Head	Ms. Maka Goderdzishvili Tel: +995 599 229925 E-mail: m.goderdzishvili@water.gov.ge
		UWSCG/IPMO Department of Projects Management, Head	Ms. Irine Chikhladze Tel: +995 598 179898 E-mail: i.chikhladze@water.gov.ge
Borrower	UWSCG/USIIP/T3	Environmental Specialist	Ms. Ketevan Chomakhidze Tel:

Type of project participant	Name of Agency/Company	Environmental Staff	Name and contact details
			+995 577 380309 E-mail: Chomakhidzek@yahoo.com
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: chem_ira@yahoo.com
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: niko@telenet.ge
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: levani.asabashvili@mail.ru
Contractor KUT-01	SMK Ulusal Insaat Ve Ticaret A.S. (Turkey)	Environmental Specialist	Ms. Natia Babukhadia E-mail: natiibab@gmail.com Tel: +995 595 150444
		H&S Specialist	Mr. Beso Balanchivadze E-mail: besobal84@gmail.com Tel: +574 188 653

Type of project participant	Name of Agency/Company	Environmental Staff	Name and contact details
Contractor ABA-01	AS Inshaat–N, LLC (Azerbaijan)	Environmental H&S Specialist	Mr. Nodar Usupishvili E-mail n.usupashvili@gmail.com 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 alexandermchedlishvili1@gmail.com 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 GUD-03 sub-project and therefore only this project is reported in this semi-annual EMR. All civil works under other USIIP/T3 sub-projects have already been completed. For more detailed information, please see para 8-20 above. Contractor under 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. Construction progress under GUD-03 sub-project is presented in the Table 3 below.

Table 3: Progress of construction works, January-June 2022, GUD-03

GUD-03	Total	July- December 2021	Progress during the reporting period (January-June 2022)
Plant and Mandatory Spare Parts Supplied from Abroad	21.70%	0.00%	13.2%
Plant and Mandatory Spare Parts Supplied from within the Employer's Country	0.00	0.00	0.00

GUD-03	Total	July- December 2021	Progress during the reporting period (January-June 2022)
Design	5.06%	2.82%	6.14%
Installation and other Services	73.25%	8.50%	43.32%
Totals:	100.00%	11.32%	62.66%

2.4 Description of Any Changes to Project Design

- 30.** During the reporting period January-June 2022, there were no changes to the agreed project design under USIIP / T3.

2.5 Description of Any Changes to Agreed Construction methods

- 31.** During the reporting period January-June 2022, there were no changes to the agreed construction methods under USIIP / T3.

3. ENVIRONMENTAL SAFEGUARD ACTIVITIES

3.1 General Description of Environmental Safeguard Activities


- 32.** A total of 2 site visits have been conducted during reported period (January - June 2022) under GUD-03 sub-projects, since due to the weather condition, construction activities started in May 2022 and included:
- The monitoring of compliance of construction activities under GUD-03 sub-project sites to the IEE/EMP requirements.
- 33.** A summary of the status of the monitoring visits, including dates of site visits, photographs, persons involved in site visits, etc., is shown in Table 4 below. During the reporting period, onsite training workshop and a meeting with representatives of the Contractors and the Supervision Consultant were held.
- 34.** 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 GUD-03 sub-project, details of the site inspection/audits are provided in the Table 4 below.
- 35.** 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 to verify compliance with environmental and HSE requirements in accordance with IEE/EMP and developed the monthly monitoring reports and submitted to SC/Eptisa.
- 36.** Environmental Monitoring Specialist of Eptisa, Mr.Irakli Legashvili conducted monthly monitoring of project sites under T3 and developed Non-compliance Notices (please see Table 4). During the reporting period two NCNs have been developed under GUD-03 sub-project (please see Annex C). ES of EPTISA also developed quarterly environmental monitoring reports based on the monthly reports submitted by Contractor and environmental site inspections and submit to UWSCG.
- 37.** 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.
- 38.** The whole reporting period (January – June 2022) went through pandemic situation of COVID-19. However, this did not affect the construction process and civil work went on regular basis. UWSCG and SC directed all concerned to take proper measures to prevent the pandemic and contractor's workers were advised to keep proper health hygiene by wearing facemask, hand washing and maintaining physical distances at the work sites.
- 39.** In response to COVID-19, the Government of Georgia and its Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs of Georgia, issued the General Guidelines Related to Infection (COVID-19) which applies to all sectors of economic activity.

40. The General Guideline for COVID-19 was also developed by the Government of Georgia specifically for the construction sector (Please see Annex E to this report).
41. 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 F). All EH&S documents, including Health and Safety Plans, as well as Site-Specific Environmental Management Plans were updated by contractors under USIIP/T3.


3.2 Site Inspections/Audits


42. Inspection and monitoring of construction sites under GUD-03 sub-project were 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 4 below.


Table 4. 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 2022)	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 B and Annex C of this report.	Weekly Monitoring Checklists	Completed
15 June 2022		Environmental monitoring specialists of SC/EPTISA Mr. Irakli Legashvili	Regular monitoring of sites	<p>WWTP 1</p> <p>Construction sites should be properly fenced from all sides and equipped with lockable gate, please see Photo N1</p>  <p>Proper warning and information signs should be</p>	<p>Verbal Instruction were given to contractor to immediately improve the situation</p> <p>Non-Compliance Notice issued (Please see Annex C)</p> <p>Photomaterials are presented in (Annex B)</p>	<p>Was completed</p> <p>Was completed</p> <p>Was completed after the visit on June 23, 2022, the corresponding</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>provided</p> <p>Excesses of excavation soil should be removed according the agreement</p> <p>Trees at the construction site should be fenced and protected</p> <p>Refilling/compaction and reinstatement process should be better provided (site should be at the same or better condition as it was before construction)</p> <p>WWTP 2</p> <p>Construction sites should be properly fenced from all sides and equipped with lockable gate, Please see</p>		<p>photos are presented below in this table.</p> <p>Completed, end of June 2022</p> <p>Completed, end of June 2022</p> <p>Was completed 2022</p> <p>Completed, end of June 2022</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>Photo N1</p>  <p>Proper warning/safety and information signs should be provided at the entrance and perimeter of the construction territories</p> <p>Parking zone should be arranged and relevant sign installed</p> <p>Deep excavation zones should be fenced by red grid and proper warning signs "Deep Excavation Zone" should be installed, please see Photo N2</p>		<p>Completed, end of June 2022</p> <p>Completed, end of June 2022</p> <p>Completed, end of June 2022</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 data-bbox="1014 805 1367 902">Surplus waste soil for refiling purposes should be stored properly</p> <p data-bbox="1014 922 1377 1052">Trees at the construction site should be fenced (freed from the surplus soil) and protected</p> <p data-bbox="1014 1071 1352 1201">Storage of construction materials should be better organized, Please see Photo N3</p>		<p data-bbox="1633 805 1877 870">Completed, end of June 2022</p> <p data-bbox="1633 938 1877 1003">Completed, end of June 2022</p> <p data-bbox="1633 1071 1877 1136">Completed, end of June 2022</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>Fuel and lubricants containers should be installed at the proper organized place with concrete floor and roofing</p> <p>Fuel and lubricants spill elimination items (sand, sawdust, special containers) should be provided at the construction site</p> <p>Household and Hazardous Waste containers with relevant signs should be installed</p>		<p>Completed, end of June 2022</p> <p>Completed, end of June 2022</p> <p>Completed, end of June 2022</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>Hazardous Waste container with should be installed at the proper organized place with concrete floor and roofing</p> <p>Waste should be placed only at the proper waste container</p> <p>Workers always should use complete PPE. Safety norms during construction works should be respected</p> <p>WWTP 3</p> <p>Construction sites should be properly fenced from all sides and equipped with lockable gate, please see photo N1</p>  <p>Proper warning and information signs should be</p>		<p>Completed, end of June 2022</p> <p>Completed, end of June 2022</p> <p>Completed, end of June 2022</p> <p>Completed, end of June 2022</p> <p>Completed, end of June 2022</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>provided</p> <p>Excesses of excavation soil should be removed according the agreement</p> <p>Refilling/compaction and reinstatement process should be better provided (site should be at the same or better condition as it was before construction)</p>		<p>Completed, end of June 2022</p> <p>Completed, end of June 2022</p>
23 June 2022		<p>Environmental monitoring specialists of SC/EPTISA Mr.Irakli Legashvili</p> <p>Head, department of Environmental Protection and Permits (DEPP) of UWSCG, Ms.Maka Goderdzishvili</p>	Monthly monitoring of construction sites	<p>WWTP 1</p> <p>Construction sites should be properly fenced from all sides and equipped with lockable gate. Please see Photo N1</p>  <p>Proper warning and information signs should be provided</p>	<p>Verbal Instruction were given to contractor to immediately improve the situation</p> <p>Non-Compliance Notice issued (Please see Annex C)</p> <p>Photo-materials are presented in</p>	<p>Completed, end of June 2022, Please see Photo N1</p>  <p>Completed, end of June 2022 Partially</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
		Environmental Specialist, USIIP, Ms.Kate Chomakhidze		<p>Top soil should be stored stored properly, and fenced by tape and signed</p> <p>Hazardous and non-hazardous waste containers should be installed at the site with proper labelling in Georgian and English language (In Chinese language as needed)</p> <p>Construction materials should be stored/segregated properly</p> <p>WWTP 2</p> <p>Proper warning/safety signs should be provided at the entrance and perimeter of the construction territories,</p>	<p>(Annex B)</p> <p>Corrective Action Plan was prepared by contractor, within the proposed deadlines, please see Annex D of this report.</p>	<p>Completed, end of June 2022, please see Photo N2 below</p>  <p>Completed, end of June 2022</p> <p>Completed, end of June 2022</p> <p>Completed, end of June 2022, please see Photo N3 below</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>please see Photo N1 below</p>  <p>Entrance gate should be fixed and lockable to avoid any unauthorized entrance at the site</p> <p>Parking zone should be arranged and relevant sign installed</p>		 <p>Completed, end of June 2022</p> <p>Completed, end of June 2022, Photo N4</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>Deep excavation zone should be arranged by warning signs “Deep Excavation Zone” and fenced with metal mesh material to avoid fall in the excavation</p> <p>Trees at the construction site should be fenced (freed from the surplus soil) and protected, please see photo N2</p>		<p>Completed, end of June 2022, Please see Photo N5</p>  <p>Completed, end of June 2022, Please see Photo N6 below</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>At the construction territory are presented small spill spots of fuel and lubricant. These contaminated places should be remediated</p> <p>Fuel and lubricants spill elimination items (sand, sawdust, special containers) should be provided at the construction site</p> <p>Hazardous Waste container with should be installed at the proper organized place with concrete floor and</p>		<p>Completed, end of June 2022, please see photo N7</p>  <p>Completed, end of June 2022</p> <p>Completed, end of June 2022</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>roofing with relevant labeling (Geo/Eng languages)</p> <p>Workers always should use complete PPE. Safety norms during construction works should be respected</p> <p>WWTP 3</p> <p>Deep excavation zone should be protected and properly fenced to avoid fall in the excavation, Please see Photo N1</p>  <p>Provide adequate lighting during the night time to avoid accidents</p>		<p>Completed, Please see Photo N8</p>  <p>Completed, end of June 2022</p> <p>Not yet completed, will be done by the end of July 2022, and reflected in the next SAEMR, July-</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>Top soil should be stored stored properly, and fenced by tape and signed</p> <p>Hazardous and non-hazardous waste containers should be installed at the site with proper labelling in Georgian and English language (In Chinese</p>		<p>December 2022</p> <p>Partially Completed at the end of June 2022, signs provided. Please see Photo N9 below</p>  <p>Top soil will be fenced by tape and signed, by the end of July 2022 and reflected in the next SAEMR, July-December 2022</p> <p>Completed, end of June 2022, Please see Photo N10</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>language as needed), Hazardous Waste container should be installed at the proper organized place with concrete floor and roofing, please see Photo N2</p>  <p>Construction materials should be stored properly</p> <p>WWTP 4</p> <p>Construction sites should be properly fenced from all sides with lockable gate, please see Photo N1</p>		 <p>Completed, end of June 2022</p> <p>Completed, end of June 2022, please see Photo N11</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 data-bbox="1010 764 1381 930">Construction waste materials should be fully removed from construction area and disposed according agreement</p> <p data-bbox="1010 1344 1381 1409">Workers should always use complete PPE. Also special</p>		<p data-bbox="1633 760 1877 906">Completed, end of June 2022, please see Photo N12</p>  <p data-bbox="1633 1344 1877 1409">Completed, end of June 2022</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>equipment during high altitude works should be always used to avoid accidents (workers damage), please see Photo N2</p>  <p>Hazardous Waste container should be installed at the proper organized place with concrete floor and roofing</p> <p>Fuel and lubricants spill elimination items (sand, sawdust, special containers) should be provided at the construction site</p>		<p>Completed, end of June 2022</p> <p>Completed, end of June 2022</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>Top soil should be stored stored properly, and fenced by tape and signed</p> <p>Fuel and lubricants containers should be installed at the proper organized place with concrete floor and roofing</p> <p>Making a fire at the construction area is prohibited, please see Photo N3</p>		<p>Partially Completed at the end of June 2022, signs provided. Please see Photo N13</p>  <p>Top soil will be fenced by tape and signed, by the end of July 2022 and reflected in the next SAEMR, July-December 2022</p> <p>Completed, end of June 2022</p> <p>Completed, end of June 2022</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 data-bbox="1014 764 1304 862">Construction materials should be better stored/segregated</p> <p data-bbox="1014 883 1367 1045">Refilling/compaction and reinstatement process should bring site at the same or better condition as it was before construction</p>		<p data-bbox="1633 808 1877 873">Completed, end of June 2022</p> <p data-bbox="1633 938 1877 1003">Completed, end of June 2022</p>

3.3 Issues Tracking (Based on Non-Conformance Notices)

43. Up to 51 non-compliances were noted during site visits under sub-project GUD-03, as it included the operation of four different construction sites (WWTP No. 1, No. 2, No. 3 and No. 4) under one sub-project. Some of the above inconsistencies were repeated during various site visits, such as fencing and lighting of construction sites with lockable gates, and installation of proper warning and safety signs at the entrance and perimeter of construction sites (please see Table 4 above). Finally, the contractor eliminated 96% of these non-compliances.
44. 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 2022 is presented below.

Table 5: Summary Table GUD-03

Total Number of Issues for Project	51
Issues Opened This Reporting Period	2
Issues Closed This Reporting Period	49
Percentage Closed	96%

46. As it is presented in Table 5 above, two issues are still opened under GUD-03 sub-project, which will be improved during the January-February 2022 and improved photos of sites will be presented in the next Semi-annual EMR, January-June 2022, these issue are as following: (i) Top soil should be stored stored properly, and fenced by tape and signed; (ii) Provide adequate lighting during the night time to avoid accidents.

3.4 Trends

47. Information from the previous semi-annual EMR (July-December 2021) was used to identify trends in environmental issues. A summary of issues outstanding during the current reporting period is presented in paragraph 43 above, and the percentage of issues open under the GM-03 subproject during the previous and current reporting periods is presented in table 6 below. As can be seen from Table 6 below, the total number of non-compliances has decreased from 110% to 51%, while the number of still open issues has increased from 3% to 4% and mainly includes inconsistencies those repeated during, such as fencing and lighting of construction sites with lockable gates, and installation of proper warning and safety signs at the entrance and perimeter of construction sites. The deadline for improving the situation is given until the end of July 2022. The results of these improvements will be presented in the next SAEMR of the reporting period - July-December 2022.

Table 6: Summary of identified trends in environmental issues

Semi-Annual EMR No	Total No of Issues	% issues Closed	% issues closed late
July-December 2021	110	97%	3%
January-June 2022	51	96%	4%

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, 6% 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 16 below. Deadlines for improvement is indicated July 2022. All improvements will be implemented within the Q3 of 2022 and relevant photo-documentation will be presented in the next SAEMR, July-December 2022.

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, there were no other impact such as aggregated materials lost, waste disposal, no community incidents have been reported under GUD-03 sub-project during the reporting period, 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. The whole reporting period went through pandemic situation of COVID-19. However, this did not affect the construction process and civil work went on regular basis. UWSCG and SC directed all concerned to take proper measures to prevent the pandemic and contractor's workers were advised to keep proper health hygiene by wearing facemask, hand washing and maintaining physical distances at the work sites. More details are provided in paragraphs 38-41 above.

4. RESULTS OF ENVIRONMENTAL MONITORING

4.1. Overview of Monitoring Conducted during Current Period

- 51. During the reporting period Environmental Quality Measurements of the Noise level and ambient air Quality were carried out by the contractor only under GUD-03 sub-project, since no construction activities were carried out under other sub-projects within the framework of USIIP/T3.
- 52. Noise and air pollution standards defined by IFC/WHO 1999, are presented in the Table 7 and 8 below.
- 53. Georgian Standards for Noise, Vibration and Air Pollution is presented in the tables 7 below.

Table 7: Noise Level Guidelines

Noise	dB		dB	
	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

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

Table 8: Air pollution Guidelines

Contaminants	IFC/WHO Guideline Value (Limit mg/m ³)
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 ₂)	0,2/ 1 Hour 0,04/1 Year
Aldehyde	n/a

55. Georgian Standards for noise level is presented in the table 9 below.

Table 9: Georgian Standards for Noise Levels

Purpose/use of area and premises	Allowable limits (A-Weighted Decibels (dBA))		
	L _{day}		23:00 – 08:00 L _{night} , Night
	08:00 - 19:00, Day	Evening 19:00- 23:00	
Educational facilities and library halls	35	35	35
Medical facilities/chambers of medical institutions	40	40	40
Living quarters and dormitories	35	30	30
Hospital chambers	35	30	30
Hotel/motel rooms	40	35	35
Trading halls and reception facilities	55	55	55
Restaurant, bar, cafe halls	50	50	50
Theatre/concert halls and sacred premises	30	30	30
Sport halls and pools	55	55	55
Small offices (≤100m ³) – working rooms and premises without office equipment	40	40	40
Small offices (≤100m ³) – working rooms and premises without office equipment	40	40	40
Conference halls /meeting rooms	35	35	35
Areas bordering with houses residential, medical establishments, social service, and children's facilities (>6 story buildings)	55	50	45
The areas bordering with hotels, trade, service, sport, and public organizations	60	55	50

Note: in case noise generated by indoor or outdoor sources is impulse or tonal, the limit must be 5dBA less than indicated in the Table.

56. Table 10 shows the threshold values of the major air pollutants as defined by the GEO, IFC and EU legislation.

Table 10: Ambient Air Quality Standards

Parameter	Averaging Period	Limit (µg/m ³)		
		Maximum Permissible Concentration (MPC) in Georgia	IFC Guideline Value	EU Ambient Air Quality Guidelines
Nitrogen Dioxide (NO ₂)	30 minutes	200	-	-
	1 Hour	-	200	200
	24 Hours	40	-	-
	1 Year	-	40	40
	10 minutes	-	500	-
	30 minutes	500	-	-

Parameter	Averaging Period	Limit ($\mu\text{g}/\text{m}^3$)		
		Maximum Permissible Concentration (MPC) in Georgia	IFC Guideline Value	EU Ambient Air Quality Guidelines
Sulphur Dioxide (SO_2)	1 Hour	-	-	350
	24 Hours	50	20	125
Carbon Monoxide (CO)	30 minutes	5,000	-	-
	24 Hours	3,000	-	-
Total Suspended Particulates (TSP) / Dust	24 Hours	150	-	-
	30 minutes	500	-	-
PM10	1 year	40	20	40
	24 hours	50	50	50
PM2.5	1 year	25	10	25
	24 hours	-	25	-
Ozone	8-hour daily max.	120	100	120

57. The Georgian Standards for vibration are designed for human comfort. These are shown in 11. Note that no standards for building damage exist.

Table 11: Georgian vibration values

Average Geometric Frequencies of Octave Zones (Hz)	Allowable Values X0, Y0, Z0			
	Vibro-acceleration		Vibro-speed	
	m/sec ²	dB	m/sec 10 ⁻⁴	dB
2	4.0	72	3.2	76
4	4.5	73	1.8	71
8	5.6	75	1.1	67
16	11.0	81	1.1	67
31.5	22.0	87	1.1	67
63	45.0	93	1.1	67

Note: It is allowable to exceed vibration normative values during daytime by 5 dB during daytime. In this table of inconstant vibrations, a correction for the allowable level values is 10dB, while the absolute values are multiplied by 0.32. The allowable levels of vibration for hospitals and rest houses have to be reduced by 3dB.

58. During the reporting period Environmental Quality Measurements of noise level and ambient air quality under GUD-03 sub-project was conducted by Ltd “NASETO GROUP” on 17 June 2022 (Please see Annex A). According to the measurement data noise level on WWTP#4 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 16 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 12:50 pm to 15:40 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 (for all four WWTPs) is more about 400 m. The next monitoring measurements will be conducted in Q3-2022 and results will be reflected in the next Semi-annual EMR, January-June 2022.

59. Environmental quality measurements of Nitrogen and sulfur dioxide, carbon monoxide and total hydrocarbon under GUD-03 are provided in the Table 12 below.

Table 12: Environmental Quality Measurements, GUD-03 (Air pollution)

#	Measurement Point		Measurement Results mg/m ³			
			Nitrogen Dioxide	Sulfur dioxide	Carbon monoxide	Total Hydrocarbo
2	Location	Coordinates				
3	WWTP N1	0457927 4707023	0.005	<0.01	0.21	<0.1
4	WWTP N2	0457037 4701059	0.004	<0.01	0.18	<0.1
5	Gudauri WWTP #3	0457747 4700115	0.009	<0.01	0.26	<0.1
6	Gudauri WWTP #4	0457826 4699476	0.014	<0.01	0.54	<0.1

60. Environmental quality measurements of Dust air pollution, noise and vibration measurements under GUD-03 are provided in the Table 13 below.

Table 13: Environmental Quality Measurements, GUD-03 (Dust, Noise, Vibration)

#	Measurement point		Measurement results								
			Noise Amax dBA	Vibro speed		Vibro acceleration		dust mg/ m3			
				mm/s	db	2 m/s2	db	pm2.5	pm10	total	
2	Location	Coordinates									
3	WWTP N1	0457927 4707023	53.2	<0.1	<66	<0.1	<100	0.014	0.019	0.024	
4	WWTP N2	0457037 4701059	54.8	<0.1	<66	<0.1	<100	0.0012	0.0015	0.021	
5	Gudauri WWTP #3	0457747 4700115	43.2	<0.1	<66	<0.1	<100	0.015	0.022	0.029	
6	Gudauri WWTP #4	0457826 4699476	69.8	0.1	66	0.1	100	0.028	0.036	0.044	

List of measurement devices unit and validity of calibration

61. During the environmental quality measurement the following measurement devices were used: **Noise** – Mini Sound level meter N05CC; **Vibration** – Smart Sensor – AR63B Vibration meter; **Dust** – Portable Dust Detector model LB-HD08 and Gasella Mikro Dust Pro (Self-calibration zero and optical filter). For nitrogen dioxide and carbon monoxide – Elan CO/NO₂; Total hydrocarbon MiniRae 7600, sulfure dioxide – WASP-XM-E-SO₂.

4.2 Trends

62. All major Non-Conformances under USIIP/T3 during the reporting period are provided in an Annex C of this report. The schedule of Joint inspection and the summary of identified issues which needs improvement under GUD-03 sub-project is provided in the Table 4 above. Recommendations to Address Environmental Issues under GUD-03 Sub-project is presented in table 16 below.

4.3 Summary of Monitoring Outcomes

63. As it was mentioned above, according to data received in June 2022 under GUD-03 sub-project noise level under WWTP #4 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 16 below are required.

4.4 Material Resources Utilisation

4.4.1 Current Period

GUD-03

64. The contractor had provide information on the material resources utilization under the GUD-03 sub-project. 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 14: Material Resources Utilization under GUD-03 Sub-project, January-June 2022

N	Utilized Resources	Monthly	Measurement
1	Consumption of Water	70	M3
2	Electricity	23539	kwt
3	Fuel	39173	L

4.4.2 Cumulative Resource Utilisation

65. No commulative resources utilization was provided by contractor despite of numerouse verbal request and instructions. This information, will be reflected in the next SAEMR, July-December 2022.

4.5 Waste Management (GUD-03)

4.5.1 Current Period

66. 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.

67. The construction waste that is allocated at the construction site is removed for its disposal that is managed by formal agreement with local municipality.

Table 15: Amount of Waste Generated under GUD-03 Sub-project, January-June 2022

N	Waste management		Measurement
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3	Municipal Waste	65	M ³
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68. During the reporting period, CNI23 kept the Site and other areas used by it in a neat and clean condition, and free from any accumulation of waste and rubbish. CNI23 disposed all rubbish and waste materials of any nature occurring at the Site, and established regular intervals of collection and disposal of such materials and waste. CNI23 also kept its haul roads free from dirt, rubbish, and unnecessary obstructions resulting from its operations. All municipal waste was disposed to an approved disposal site by Gudauri Municipality.

GUD 03

69. Household waste is collected at the construction sites in the Household Waste containers and transmitted to Municipal waste containers and finally disposed at the Kazbegi landfill.

70. Construction/demolition waste are also disposed according to the agreement with Solid Waste Management Company at the Kazbegi landfill, please see relevant agreement in ANNEX G to this report.

71. Hazardous waste is collected at the construction territories in the Hazardous Waste containers and according agreement transmitted to Medical Technology Company for final disposal. HSE specialists of the construction companies is responsible for the waste management under GUD-03 sub-project. On-job environmental safeguards training have been also conducted which included topics of waste management as well, please see relevant agreement in ANNEX G to this report.

4.5.2 Cumulative Waste Generation

N/A

4.6 Health and Safety

4.6.1 Community Health and Safety

72. No community incidents have been reported under GUD-03 sub-project during the reporting period.

73. Relevant measures are undertaken for COVID-19 prevention at construction sites, more detailed information is provided in the paragraphs 38-41 above.

4.6.2 Worker Safety and Health

GUD-03

74. 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.

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

- PPE;
- Working on height;
- Top soil stripping and storage;
- Ground works;
- Manual works

76. Near Missis (two) within the framework of the GUD-03 sub-project included

- work at height without protective equipment
- Workers without PPE.

77. 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

78. Routine personnel trainings and toolbox talks happen by the construction companies almost on daily basis under GUD-03 sub-projects. Environemntal Specialist of SC Mr. Irakli legashvili and Environmental Specialist of USIIP Ms. Kate Chomakhidze also provided verbal instructions and training for Construction Company's Environmental and H&S officers on a regular basis in accordance with the relevant Terms of Referencis. The above trainings were conducted to ensure that contractors understand their responsibilities for the implementation of the IEE/EMP, and to mitigate environmental issues associated with their construction activities. Since only GUD-03 sub-project is under implementation within the framework of the USIIP/T3, and due to weather conditions, construction work began at the end of May 2022, the ESs gave only verbal instructions and conducted a limited number of trainings. Additional activities will take place during the next reporting period, July-December 2022, and will be reflected in the next SAEMR report.

5. FUNCTIONING OF THE SEMP

5.1. SEMP Review

79. 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)

80. 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.

81. 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

82. 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

83. During the next reporting period the tracking of actions to address non-conformances will be improved by IPMO. 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 2022.

7. SUMMARY AND RECOMMENDATIONS

7.1 Summary

84. Individual and joint on-site monitoring activities were conducted by Environmental Monitoring Specialist of SC and Environmental Specialist of USIIP on a regular basis.
85. Due to the outbreak of the 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.
86. The General Guideline for COVID-19 was also developed by the Government of Georgia specifically for the construction sector.
87. 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 in May 2020.
88. The monitoring activities included monitoring of compliance of construction activities to the IEE/EMP and SEMP requirements under GUD-03 sub-projects.
89. 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.
90. Three 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.
91. 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.
92. Necessary instructions have been given to the Contractor by UWSCG and SC to follow the EMP's and SSEMP's requirements under GUD-03 sub-projects.

7.2 Recommendations

93. During the reporting period, January-June 2022, the T3 of Investment Program was implemented in accordance with the requirements of ADB - SPS 2009 and the National Legislation.
94. More detailed recommendations/next steps for the implementation of T3 during the next reporting period July-December 2022 are provided in the Table 16 below:

Table 16: Recommendations to Address Environmental Issues under GUD-03 Sub-project

Recommendations GUD-03 sub-project	
GUD-03	
(i) Top soil should be stored properly, and fenced by tape and signed;	Instruction are given to contractor to improve the situation and to conduct following mitigation measures by the end of July 2022
(ii) Provide adequate lighting during the night time to avoid accidents	
Noise from the construction activities should not cause disruption and nuisance to nearby community and other sensitive receptors (i.e. school, hospitals).	<p>Instruction are given to contractor to improve the situation and to conduct following mitigation measures by the end of July 2022</p> <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.,</p>

Recommendations GUD-03 sub-project	
	<p>panels, curtains, or partitions) to reduce the emission of engine noise</p> <p>Conduct meetings with population and provide information related to schedule of construction activities and noise caused by the project activities. Relevant information and documentations will be reflected in the next EMR, July-December 2022</p>

95. Conduct monitoring of Noise and Ambient Air quality under GUD-03 project near the sensitive receptors of Construction sites in September 2022.

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

Parameters	Quarterly measurement
Dust	September 2022
PM _{2.5}	September 2022
PM ₁₀	September 2022
Vibration	September 2022
Carbon monoxide	September 2022
Nitrogen dioxide	September 2022
Sulfur dioxide	September 2022
Noise	September 2022

ANNEXES

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



China Nuclear Industry 23 Construction Co., Ltd
Construction of Wastewater Treatment Plants in Gudauri
(UWSCG-ICB-GUD-03-2018)

The Contractor

Address: #5 Java Street, 0180 Tbilisi, Georgia
Telephone: +995 571246556

Eptisa Servicios de Ingenieria,S.L.
Mr. Manuel Villafranca, Team Leader
David Gamrekeli Street 2
"Axis" Business Center, 4th floor
Tbilisi Georgia

[your reference/date]	[our reference/date]	[your contact]	[e-mail]
	GUD03-CNI23-ENG-22024 2022-06-19	Luo Ke	cni23georgiaofficial@gmail.com

Construction of Wastewater Treatment Plants in Gudauri
(UWSCG-ICB-GUD-03-2018)
Subject: Environmental Parametric Measurement Report

Dear Mr. Joseph,

We are sending Environmental Parametric Measurement Report, please kindly find the attachment.

Yours sincerely,
Contractor of the Construction of Wastewater Treatment Plants in Gudauri

Mr. Luo Ke
Project Manager

Appendix1 : Environmental Parametric Measurement Report 9 page.

Copy to: Contractor internal

**Design and Construction of Waste Water Treatment Plant in
Gudauri (UWSCG-ICB-GUD-03-2018).
Date of Commencement August 1 2019 Term of Work
Completion December 2022**

1. Introduction

The Government of Georgia wishes to improve and expand Water Supply and Sanitation (WSS) Services across urban centres by leveraging donor and private sector funds, and has requested ADB to develop an investment program to be financed through a multi-tranche financing facility (MFF). The proposed Investment Program will specifically address basic urban infrastructure and services management in the provincial capitals and secondary towns. The Investment Program will be implemented in various tranches; each tranche containing technically feasible and economically viable subprojects developed by UWSCG and agreed with ADB.

The present tender comprises the Detailed Design and the Construction of five Wastewater Treatment Plants in Gudauri town.

2. Location of the project areas

Gudauri is a ski resort located on the south-facing plateau of The Greater Caucasus Mountain Range in Georgia, in the Stepantsminda District, along the Georgian Military Highway near the Cross Pass, 120 km to the north of the capital Tbilisi on the way to Kazbegi and two hours drive from the Tbilisi International Airport..

3. Regulatory Requirements

The environmental quality standards on the territory of Georgia are regulated by Decree No 297N of August 16, 2001 of the Minister of Labor, Health and Social Affairs of Georgia "On the approval of the environmental quality standards" (State Registration Code 470.230.000.11.119.004.920).

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

1. Decree No 38/N of February 24, 2003 of the Minister of Labor, Health and Social Affairs of Georgia, SSM III, №16, 06.03.2002, Article 150
2. Decree No.251/N of the Minister of Labor, Health and Social Affairs of Georgia of September 15, 2006– SSMIII, №129, 20.09.2006, Article 1716
3. Decree No.351/N of the Minister of Labor, Health and Social Affairs of Georgia of December 17, 2007– SSMIII, №179, 18.12.2007, Article 1974
4. Decree No.304/N of the Minister of Labor, Health and Social Affairs of Georgia of September 18, 2009– SSMIII, №115, 22.09.2009, Article 1312

5. Decree No.98/N of the Minister of Labor, Health and Social Affairs of Georgia of April 14, 2010– SSMIII, №39, 14.04.2010, Article 622

6. Decree No.350/N of the Minister of Labor, Health and Social Affairs of Georgia of October 25, 2010 - SSMIII, №138, 26.10.2010, Article 2000

7. Decree No.01-24/N of the Minister of Labor, Health and Social Affairs of Georgia of May 17, 2012 – web-site, 17.05.2012.

3. Description of the work to be performed.

In accordance with the agreement concluded between the Construction Contractor and Naseto Group LLC, environmental quality analysis was carried out at various points in Gudauri.

Construction work has not yet been carried out, so all the measurement results are background. Background measurements were carried out at the sites of the future construction of the reservoir, pumping station and pipeline route.

4. Performed measurements and results

Gudauri is not a settlement where stationary observations of the quality of atmospheric air are carried out, therefore pollution data are not available.

4.1 Noise and vibration.

The measured noise and vibration are also background.

As a rule, the noise caused by the movement of equipment is reduced at some distance. Such a reduction has logarithmic properties. In the case of noise caused by construction work, the noise propagation scheme from the noise point is used, which can be determined as follows: Noise level 1 - Noise level 2 = $20 \log r2 / r1$, which means that when doubling the distance, the noise decreases by 6 dBA. .

Table 2: Noise levels

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

4.4 Air quality values

The quality indicators of the following components measured in the project area: air quality with total hydrocarbons, sulfur and nitrogen dioxide, carbon monoxide ,dust,noise and vibration by the executor The results of the accomplished quality measurements given in Annex1.

ჰერის აზოტის და გოგირდის დიოქსიდით, ნახშირბადის მონოოქსიდით და
 ჯამური ნახშირწყალბადებით დაბინძურების გაზომვების შედეგები
 17.06.2022. 12⁵⁰ – 15⁴⁰

**Nitrogen and sulfur dioxide, carbon monoxide and total hydrocarbon air pollution
 measurement results on 17.06.2022. 12⁵⁰ – 15⁴⁰**

№	გაზომვის წერტილის Measurement point		გაზომვის შედეგები მგ/მ ³ Measurement results mg/m ³			
	ადგილ მდებარეობა Location	კოორდი- ნატები Coordinates	აზოტის დიოქსიდი nitrogen dioxide	გოგირდის დიოქსიდი sulfur dioxide	ნახშირბადის მონოოქსიდი carbon monoxide	ჯამური ნახშირწყალბ ადები total hydrocarbon
1	WWTP 1	0457927 4701723	0.005	<0.01	0,21	<0.1
2	WWTP 2	0457037 4701059	0,004	<0.01	0,18	<0.1
3	WWTP 3	0457747 4700115	0.009	<0.01	0,26	<0.1
4	WWTP 4	0457826 4699476	0,014	<0.01	0,54	<0.1

“ჩაინა ნუკლეარ ინდასტრი 23 ქონსტრაქშენ კო“-ს ფილიალი საქართველოში
“Georgia Branch of China Nuclear 23 Consturction Company Co.,Ltd”
 ჰაერის მტვერით დაბინძურების, ხმაურის და ვიბრაციის გაზომვების შედეგები
 17.06.2022. 12⁰⁰ – 15⁰⁰

Dust air pollution, noise and vibration measurements on 17.06.2022. 12⁰⁰ – 15⁰⁰

№	გაზომვის წერტილის Measurement point		გაზომვის შედეგები Measurement results							
	ადგილ მდებარეობა Locastion	კოორდი- ნატები Coordinates	ხმაური A _{max} დბ Noise A _{max} db	ვიბრო სიჩქარე Vibro Speed		ვიბრო აჩქარება Vibro acceleration		მტვერი მგ/მ ³ Dust mg / m ³		
				მმ/წმ mm/s	დბ db	მ/წმ ² m/s ²	დბ db	Pm _{2.5}	Pm ₁₀	Total
1	WWTP 1	0457927 4701723	53,2	<0.1	<66	<0.1	<100	0.014	0.019	0.024
2	WWTP 2	0457037 4701059	54,8	<0.1	<66	<0.1	<100	0.0012	0.0015	0.021
3	WWTP 3	0457747 4700115	43,2	<0.1	<66	<0.1	<100	0.015	0.022	0.029
4	WWTP 4	0457826 4699476	69,8	0,1	66	0,1	100	0,028	0,036	0,044

გაზომვის დროს გამოყენებულია ხელსაწყოები./During measurement tools used:
 ხმაური/Noise - Mini Sound Level Meter N05CC;
 ვიბრაცია/Vibration- Smart Sensor ® AR63B Vibration Meter;
 დამტვერიაწობა/ Dust- Portable Dust Detector model LB-HD08
 და Gasella Mikro Dust Pro (თვითკალიბრაცია წულღვანი და ოფტიკური ფილტრით./Self-
 calibration zero and optical filter.). აზოტის დიოქსიდის და ნახშირბადის მონოოქსიდის -
 nitrogen dioxide and carbon monoxide - Эпан CO/NO₂;
 ჯამური ნახშირწყალბადების - total hydrocarbon MiniRae 7600;
 გოგირდის დიოქსიდის - sulfur dioxide – WASP-XM-E-SO₂.

2001 წლის 16 აგვისტოს, საქართველოს შრომის, ჯანმრთელობისა და სოციალური დაცვის
 მინისტრის ბრძანება №297/ნ, გარემოს ხარისხობრივი მდგომარეობის ნორმების დამტკიცების
 შესახებ: / August 16, 2001, the Ministry of Labor, Health and Social Affairs of Georgia №297 / N,
 approval environmental quality of the norms:

დამტვერიაწობის ნორმა შეადგენს 0.5 მგ/მ³; / Dust norm is 0.5 mg / m³;
 აზოტის დიოქსიდის ნორმა შეადგენს 0.2 მგ/მ³; / nitrogen dioxide norm is 0.2 mg / m³;
 გოგირდის დიოქსიდის ნორმა შეადგენს 0.5 მგ/მ³; / sulfur dioxide norm is 0.5 mg / m³;
 ნახშირბადის მონოოქსიდის ნორმა შეადგენს .5 მგ/მ³; / carbon monoxide norm is .5 mg / m³;
 ჯამური ნახშირწყალბადების ნორმა შეადგენს 1 მგ/მ³; / total hydrocarbon norm is .1 mg /m³;
 ვიბროსიჩქარის ნორმა შეადგენს 112 დბ; / Vibro-speed norm is 112 db;
 ვიბროაჩქარების ნორმა სპეციალური დამცავი საშუალებების გამოყენების გარეშე - 126
 დბ./Vibro acceleration norm special protective outlets without using - 126 db.

დირექტორი:
 Director

ტექნიკური შემსრულებელი
 Technical Contractor



ნ. გაბუნია
 N. Gabunia

ს. ხატავა
 S. Khatsava

WWTP 1 17.06.2022



WWTP2 17.06.2022



WWTP3 17.06.2022





ANNEX B: PROJECT PHOTOS

PROJECT PHOTOS GUD-03

Construction of Gudauri Waste Water Treatment Plant N1



Construction of Gudauri Waste Water Treatment Plant N2



Construction of Gudauri Waste Water Treatment Plant N3



Construction of Gudauri Waste Water Treatment Plant N4





ANNEX C: NON-CONFORMANCE NOTICE

Non-compliance GUD-03, 16 June 2022

Non-Compliance Notice

Project: Urban Services Improvement Investment Program, Georgia	Non-compliance Notice Gudauri
Contract No: UWSCG-ICB-GUD-03	
Contractor: China Nuclear Industry 23 Construction Co., Ltd	
Reference: 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 urgently .	

WWTP 1

- Construction sites should be properly fenced from all sides and equipped with lockable gate
- Proper warning and information signs should be provided
- Excesses of excavation soil should be removed according the agreement
- Trees at the construction site should be fenced and protected
- Refilling/compaction and reinstatement process should be better provided (site should be at the same or better condition as it was before construction)

WWTP 2

- Construction sites should be properly fenced from all sides and equipped with lockable gate
- Proper warning/safety and information signs should be provided at the entrance and perimeter of the construction territories
- Parking zone should be arranged and relevant sign installed
- Deep excavation zones should be fenced by red grid and proper warning signs "Deep Excavation Zone" should be installed
- Surplus waste soil for refiling purposes should be stored properly
- Trees at the construction site should be fenced (freed from the surplus soil) and protected
- Storage of construction materials should be better organized
- Fuel and lubricants containers should be installed at the proper organized place with concrete floor and roofing
- Fuel and lubricants spill elimination items (sand, sawdust, special containers) should be provided at the construction site
- Household and Hazardous Waste containers with relevant signs should be installed
- Hazardous Waste container with should be installed at the proper organized place with concrete floor and roofing
- Waste should be placed only at the proper waste container
- Workers always should use complete PPE. Safety norms during construction works should be respected

WWTP 3

- Construction sites should be properly fenced from all sides and equipped with lockable gate
- Proper warning and information signs should be provided
- Excesses of excavation soil should be removed according the agreement
- Refilling/compaction and reinstatement process should be better provided (site should be at the same or better condition as it was before construction)

Photos of WWTP 1



Photos of WWTP 2





Photos of WWTP 3



All these conditions have to be remedied within seven days (by the 24.06.2022) by the prime Contractor (China Nuclear Industry 23 Construction Co., Ltd)

Date: 15.06.2022	
Irakli Legashvili EPTISA - Environment	

Non-Compliance Notice

Project: Urban Services Improvement Investment Program, Georgia	Non-compliance Notice Gudauri
Contract No: UWSCG-ICB-GUD-03	
Contractor: China Nuclear Industry 23 Construction Co., Ltd	
Reference: 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 urgently .	
<p>WWTP 1</p> <ul style="list-style-type: none"> - Construction sites should be properly fenced from all sides and equipped with lockable gate - Proper warning and information signs should be provided - Top soil should be stored stored properly, and fenced by tape and signed - Hazardous and non-hazardous waste containers should be installed at the site with proper labelling in Georgian and English language (In Chinese language as needed) - Construction materials should be stored/segregated properly <p>WWTP 2</p> <ul style="list-style-type: none"> - Proper warning/safety signs should be provided at the entrance and perimeter of the construction territories - Entrance gate should be fixed and lockable to avoid any unauthorized entrance at the site - Parking zone should be arranged and relevant sign installed - Deep excavation zone should be arranged by warning signs "Deep Excavation Zone" and fenced with metal mesh material to avoid fall in the excavation - Trees at the construction site should be fenced (freed from the surplus soil) and protected - At the construction territory are presented small spill spots of fuel and lubricant. These contaminated places should be remediated - Fuel and lubricants spill elimination items (sand, sawdust, special containers) should be provided at the construction site - Hazardous Waste container with should be installed at the proper organized place with concrete floor and roofing with relevant labeling (Geo/Eng languages) - Workers always should use complete PPE. Safety norms during construction works should be respected <p>WWTP 3</p> <ul style="list-style-type: none"> - Deep excavation zone should be protected and properly fenced to avoid fall in the excavation - Provide adequate lighting during the night time to avoid accidents - Top soil should be stored stored properly, and fenced by tape and signed - Hazardous and non-hazardous waste containers should be installed at the site with proper labelling in Georgian and English language (In Chinese language as needed), Hazardous Waste container should be installed at the proper organized place with concrete floor and roofing - Construction materials should be stored properly <p>WWTP 4</p> <ul style="list-style-type: none"> - Construction sites should be properly fenced from all sides with lockable gate 	

- Construction waste materials should be fully removed from construction area and disposed according agreement
- Workers should always use complete PPE. Also special equipment during high altitude works should be always used to avoid accidents (workers damage)
- Hazardous Waste container should be installed at the proper organized place with concrete floor and roofing
- Fuel and lubricants spill elimination items (sand, sawdust, special containers) should be provided at the construction site
- Top soil should be stored stored properly, and fenced by tape and signed
- Fuel and lubricants containers should be installed at the proper organized place with concrete floor and roofing
- Making a fire at the construction area is prohibited
- Construction materials should be better stored/segregated
- Refilling/compaction and reinstatement process should bring site at the same or better condition as it was before construction

Photos of WWTP 1



Photos of WWTP 2



WWTP 3



Photos of WWTP 4








All these conditions have to be remedied within seven days (by the 04.07.2022) by the prime Contractor (China Nuclear Industry 23 Construction Co., Ltd)

Date of site visits 23.06.2022

ANNEX D: CORRECTIVE ACTION PLAN, AFTER SITE VISIT ON 23 JUNE 2022

Rectification photos of WWTP1:

	
<p>Equipped with lockable gate</p>	<p>Construction sites properly fenced from all sides And Proper warning and information signs</p>
	
<p>Excesses of excavation soil be removed according the agreement</p>	<p>Refilling/compaction and reinstatement process be better provided</p>
	
<p>Excesses of excavation soil be removed according the agreement</p>	





Rectification photos of WWTP2:

	
<p>Proper warning/safety signs be provided at the entrance and perimeter of the construction territories</p>	<p>Proper warning/safety signs be provided at the entrance and perimeter of the construction territories</p>
	
<p>Entrance gate be fixed and lockable to avoid any unauthorized entrance at the site</p>	<p>Parking zone be arranged and relevant sign installed</p>
	
<p>Parking zone be arranged and relevant sign installed</p>	<p>Deep excavation zone be arranged by warning signs "Deep Excavation Zone" and fenced with metal mesh material to avoid fall in the excavation</p>

	
<p>Deep excavation zone be arranged by warning signs "Deep Excavation Zone" and fenced with metal mesh material to avoid fall in the excavation</p>	<p>Deep excavation zone be arranged by warning signs "Deep Excavation Zone" and fenced with metal mesh material to avoid fall in the excavation</p>
	
<p>Trees at the construction site be fenced (freed from the surplus soil) and protected</p>	<p>Fuel and lubricants spill elimination items be provided at the construction site</p>
	
<p>small spill spots of fuel and lubricant be remediated</p>	<p>Hazardous Waste container be installed at the proper organized place with relevant labeling</p>

	
<p>Workers always use complete PPE. Safety norms during construction works be respected</p>	

Rectification photos of WWTP3:







	
<p>Refilling/compaction and reinstatement process be better provided</p>	<p>Construction sites be properly fenced from all sides and equipped with lockable gate</p>
	
<p>Proper warning and information signs be provided</p>	<p>Excesses of excavation soil be removed according the agreement</p>

CORRECTIVE ACTION PLAN

Rectification photos of WWTP1:

	
Equipped with lockable gate	Construction sites properly fenced from all sides And Proper warning and information signs
	
Top soil fenced by tape	Top soil signed
	
Hazardous and non-hazardous waste containers be installed at the site with proper labelling in Georgian and English language	Construction materials be stored/segregated properly

Rectification photos of WWTP2:

	
<p>Proper warning/safety signs be provided at the entrance and perimeter of the construction territories</p>	<p>Proper warning/safety signs be provided at the entrance and perimeter of the construction territories</p>
	
<p>Entrance gate be fixed and lockable to avoid any unauthorized entrance at the site</p>	<p>Parking zone be arranged and relevant sign installed</p>
	
<p>Parking zone be arranged and relevant sign installed</p>	<p>Deep excavation zone be arranged by warning signs "Deep Excavation Zone" and fenced with metal mesh material to avoid fall in the excavation</p>

	
<p>Deep excavation zone be arranged by warning signs "Deep Excavation Zone" and fenced with metal mesh material to avoid fall in the excavation</p>	<p>Deep excavation zone be arranged by warning signs "Deep Excavation Zone" and fenced with metal mesh material to avoid fall in the excavation</p>
	
<p>Trees at the construction site be fenced (freed from the surplus soil) and protected</p>	<p>Fuel and lubricants spill elimination items be provided at the construction site</p>
	
<p>small spill spots of fuel and lubricant be remediated</p>	<p>Hazardous Waste container be installed at the proper organized place with relevant labeling</p>

<p>Workers always use complete PPE. Safety norms during construction works be respected</p>	

Rectification photos of WWTP3:

	<p>No night work</p>
<p>Deep excavation zone be protected and properly fenced to avoid fall in the excavation (No Deep excavation zone anymore They've all been buried)</p>	<p>Provide adequate lighting during the night time to avoid accidents</p>
<p>Top soil be stored stored properly, and fenced by tape and signed</p>	<p>Top Soil stored properly and signed</p>



Hazardous and non-hazardous waste containers be installed at the site with proper labelling in Georgian and English language



Construction materials be stored properly

Rectification photos of WWTP4:



Construction sites be properly fenced from all sides with lockable gate






Construction sites be properly fenced from all sides with lockable gate



Construction waste materials be fully removed from construction area and disposed according



Hazardous Waste container should be installed at the proper organized place

agreement	
	
<p>Fuel and lubricants spill elimination items (sand, sawdust, special containers) be provided at the construction site</p>	<p>Top soil be stored stored properly, and fenced by tape and signed</p>
	
<p>Refilling/compaction and reinstatement process bring site at the same or better condition as it was before construction</p>	

ANNEX E: 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 - intlog.moh.gov.ge.

For further information, please contact:

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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;

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- 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.



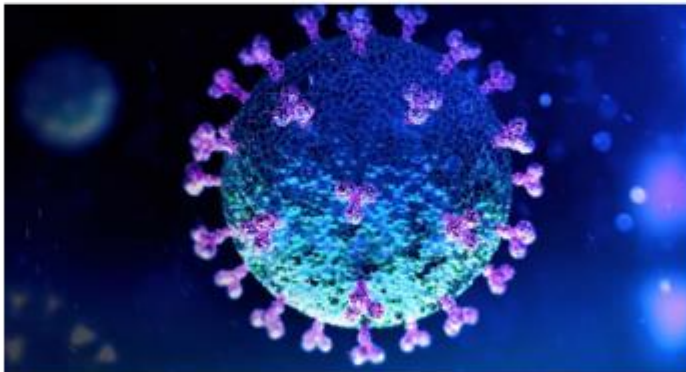
ANNEX F: COVID 19 EMERGENCY MANAGEMENT PLAN



**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





ANNEX G: DISPOSAL OF WASTE UNDER GUD-03 SUB-PROJECT

DISPOSAL OF CONSTRUCTION WASTE, AGREEMENT BETWEEN THE GEORGIAN SOLID WASTE MANAGEMENT COMPANY AND CONTRACTOR – LTD “CHINA NUCLEAR 23 CONSTRUCTION CO.”

მომსახურების ხელშეკრულება	
ქ. თბილისი	29.11.2021წ
<p>შპს „საქართველოს მყარი ნარჩენების მართვის კომპანია“, მისი დირექტორის გიორგი შუხოშვილის სახით, (შემდგომში წოდებული როგორც „შემსრულებელი“) ერთის მხრივ და მეორეს მხრივ შპს „ჩაინა ნუკლეარ ინდასტრი 23 კონსტრუქშენ კო-ს ფილიალი საქართველოში“ წარმოდგენილი მისი დირექტორის ლუი ქეს სახით, (შემდგომში წოდებული როგორც „დამკვეთი“) მეორის მხრივ, საქართველოს მოქმედი კანონმდებლობისა და საწარმოს წესდების მე-8 მუხლის მე-8 პუნქტის შესაბამისად, ურთიერთ შეთანხმების საფუძველზე დებენ ხელშეკრულებას შემდეგზე:</p>	
<p>1.1 შემსრულებელი ორგანიზაცია 2017 წლის 08 თებერვლის N8-თ ბრძანების საფუძველზე, ახორციელებს იურიდიული და/ან ფიზიკური პირების მიერ წარმოქმნილი სამშენებლო და ნგრევის შედეგად მიღებული მყარი ნარჩენის განთავსების მომსახურებას შემსრულებლის ბალანსზე არსებული ქაზბეგის არასახიფათო ნარჩენების ნაგავსაყრელზე (შემდგომში – მომსახურება).</p>	
<p>მუხლი 2. ხელშეკრულების პირობები</p> <p>2.1 შემსრულებელი ვალდებულია დროულად და ხარისხიანად მოემსახუროს დამკვეთს და უზრუნველყოს ხელშეკრულების 1.1 პუნქტში აღნიშნული მომსახურების გაწევა 2021 წლის 31 დეკემბრის ჩათვლით.</p>	
<p>მუხლი 3. მზარეთა უფლება-მოვალეობები</p> <p>3.1 შემსრულებლის უფლება-მოვალეობები:</p> <p>3.1.1 დროულად და ხარისხიანად განახორციელოს 1.1 მუხლში აღნიშნული მომსახურება.</p> <p>3.1.2 მომსახურების გაწევისას დაიცვას საერთაშორისო სტანდარტებითა და ტექნიკური რეგლამენტებით განსაზღვრული პირობები.</p> <p>3.1.3 ხელშეკრულებით განსაზღვრულ ვადაში დამკვეთისაგან მოითხოვოს მომსახურების ღირებულების დროულად გადახდა.</p> <p>3.1.4 დამკვეთისაგან მოითხოვოს წინამდებარე ხელშეკრულების პირობების დაცვა.</p> <p>3.2 დამკვეთის უფლება-მოვალეობები:</p> <p>3.2.1 ხელშეკრულების მოქმედების პერიოდში მოითხოვოს შემსრულებლისაგან წინამდებარე ხელშეკრულების პირობების დაცვა.</p> <p>3.2.2 ხელშეკრულებით განსაზღვრულ ვადაში და პირობებით გადაუხადოს შემსრულებელს მომსახურების ღირებულება.</p> <p>3.2.3 შემსრულებლის კუთვნილ არასახიფათო ნარჩენების ნაგავსაყრელზე ნარჩენის შემოტანა უზრუნველყოს სახანძრო და უსაფრთხოების ნორმების დაცვით.</p>	
<p>მუხლი 4. ანგარიშსწორება და ხელშეკრულების ღირებულება</p> <p>4.1 1 (ერთი) ტონა იურიდიული და/ან ფიზიკური პირების მიერ წარმოქმნილი სამშენებლო და ნგრევის შედეგად მიღებული მყარი ნარჩენის განთავსების მომსახურების ღირებულება შეადგენს 10 (ათი ლარი) ლარს დღგ-ს ჩათვლით დამკვეთი, შემსრულებლის მიერ გასაწევი მომსახურების შესაბამის ანაზღაურებას უზრუნველყოფს არასახიფათო ნარჩენების ნაგავსაყრელზე ყოველთვიურად ფაქტიურად შეტანილი ნარჩენის საერთო მოცულობის შესაბამისად.</p>	

4.2 დამკვეთი ვალდებულია ჩარიცხოს თანხა შემსრულებლის საბანკო ანგარიშზე შესაბამისი ანგარიშ-ფაქტურის ატვირთვიდან 10 (ათი) კალენდარულ დღეში.

4.3 შემსრულებლის მიერ წინამდებარე ხელშეკრულებით ნაკისრი ვალდებულებების შესრულების შემდეგ მხარეები ადგენენ ნარჩენების განთავსების აქტს, რაც ადასტურებს შემსრულებლის მიერ ნაკისრი ვალდებულებების ჯეროვნად შესრულებას.

4.4 შემსრულებლის მხრიდან ნარჩენების განთავსების აქტს ხელს აწერს შემსრულებლის სტრუქტურული ერთეულის - რეგიონული მართვის დეპარტამენტის თანამშრომელი შესაბამის რეგიონში.

მუხლი 5. ხელშეკრულების მოქმედების ვადა და მისი შეწყვეტის წესი

5.1 წინამდებარე ხელშეკრულება ძალაში შედის მხარეთა მიერ მისი ხელმოწერის მომენტიდან და მოქმედებს მხარეთა მიერ ნაკისრი ვალდებულებების სრულად და ჯეროვნად შესრულებამდე - 2021 წლის 31 დეკემბრის ჩათვლით.

5.2 ხელშეკრულების ვადაზე შეწყვეტა მხარეებს არ ათავისუფლებთ ხელშეკრულების შეწყვეტამდე შესასრულებელი ვალდებულების შესრულების მოვალეობისაგან.

მუხლი 6. სადავო საკითხების მოგვარება

6.1 დამკვეთსა და შემსრულებელს შორის წინამდებარე ხელშეკრულების რეალიზაციისას წარმოშობილი სადავო საკითხები წესრიგდება მხარეთა შეთანხმებით, ხოლო შეთანხმების მუდმივად შეწყვეტის შემთხვევაში სადავო საკითხს განიხილავს სასამართლო.

მუხლი 7. დასვენითი დებულებები

7.1 წინამდებარე ხელშეკრულების ყველა მუხლი და დანართი წარმოადგენს მის განუყოფელ ნაწილს. ხელშეკრულებაში ცვლილების შეტანა შეიძლება მოხდეს მხარეთა შეთანხმებით მხოლოდ წერილობით.

7.2 ხელშეკრულების მხარეები თანხმდებიან მასზე, რომ იმ შემთხვევაში, თუ შემსრულებელი ორგანიზაციის 2017 წლის 08 თებერვლის N8-ო ბრძანების დანართში, რომლითაც რეგულირდება შესატანი ნარჩენის სახეობები და საფასური შევა რაიმე სახის ცვლილება, ხელშეკრულება დაკორექტირდება შესაბამისად.

7.3 წინამდებარე ხელშეკრულება შედგენილია 2 (ორი) თანაბარი იურიდიული ძალის მქონე ეგზემპლარად ქართულ ენაზე. ერთი ეგზემპლარი გადაეცემა დამკვეთს, ხოლო ერთი ეგზემპლარი ინახება შემსრულებელთან.

ს. ბ. ბ. ა.
ს. ბ. ბ. ა.
1049E
TO BRA

შეხვეტი 8. მზარეთა რეკვიზიტები და ხელმოწერები:

შესრულებელი:

შპს „საქართველოს მყარი ნარჩენების მართვის კომპანია“, იურიდიული მის: ქ. თბილისი, ანა პოლიტეკოვსკაიას ქ. N14 მე-3 სართული, საიდენტიფიკაციო კოდი: 404942470, საბანკო რეკვიზიტები: ბანკი: სს „თიბისი ბანკი“, ბანკის კოდი: TBCBGE22, ანგარიშის ნომერი: GE51TB7161936080100005.

ხელმოწერა



გიორგი შუხოშვილი

დამკვეთი:

შპს „ჩინა ნუკლეარ ინდასტრი 23 კონსტრუქშენ კო-ს ფილიალი საქართველოში“ იურიდიული მისამართი: საქართველო, ქ. თბილისი, ნაძალადევის რაიონი, ჯაგის ქ. N 5 საიდენტიფიკაციო კოდი: 404952789

ხელმოწერა



შენიშვნა



HAZARDOUS WASTE DISPOSAL SERVICE AGREEMENT BETWEEN THE LTD "CHINA NUCLEAR INDUSTRY 23 CONSTRUCTION CO." AND MEDICAL TECHNOLOGY.

Waste Disposal Service Agreement #21/06-1

On residuals utilization (placement) of the overdue, inapt, discounted and damaged products.

Tbilisi 21st of June 2021

On the one hand "Georgia Branch of China Nuclear Industry 23 Construction Co., Ltd" Code# 404952789, represented by director Luo Ka, hereinafter the Customer and on the other hand "Medical Technology" Ltd., in the face of its director Gia Gogbaidze, hereinafter the Executor, conclude the present Agreement on the following:

1. Subject of the Agreement

1.1 The Customer orders and the Executor commit to the obligation to provide services and utilize the overdue, inapt, discounted, damaged production such as: accumulators, recycled oil and other hazardous waste for the projects in Gudauri area.

1.2 The types, volumes, service cost and other terms vary with each order according to the Appendix 1 Price Schedule.

2. Cost and payment terms

2.1 The cost for services to be provided according to the Agreement depends on the weight of the disposal to be utilized.

2.2 Unit price for the disposals of utilization could refer to Appendix 1.

2.3 Payment for the service should be implemented after signing the Acceptance Act in within 5 days.

3. Utilization Terms

3.1 The Customer should inform the Executor about the disposal volume which need to be utilized 2 (two) days in advance.

3.2 After receiving the notification of the Customer, the Executor will come and weigh the disposals, for which both parties should sign an Act and take the disposals away from site.

3.3 The Executor should utilize the disposal within 5-10 days after receiving these disposals and will provide the Acceptance Act to the Customer in the next day.

3.4 After signing the Acceptance Act by both parties, the service fee should be paid within 5 days.

4. Rights and Duties of The Parties

4.1 The Executor's rights and duties:

4.1.1 The Executor promises that he has full right to implement the Agreement obligations, which is proven by Permission #74 of the Ministry of Environment and Natural Resources Protection of 29.12.2015 and 16.01.2017 issued with # 000233, MD-1 permit.

4.1.2 The Executor is obliged to fulfill the services within the agreed period under this Agreement.

4.1.3 The Executor is obliged to compensate the Customer the damage in case of infringement of terms and conditions.

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4.1.4 The Executor has the right to demand the fulfillment of the agreed obligations from the Customer. Otherwise, he will demand to cover the damages.

4.2 The Customer's rights and duties:

- 4.2.1 The Customer is obliged to pay the Executor in due time for his services.
- 4.2.2 The Customer is obliged to timely supply the Executor the production to be utilized.
- 4.2.3 The Customer has the right to demand the Executor to cover the damage, if he does not fulfill the agreed duties.
- 4.2.4 The Customer has the right to request the Executor to fulfill his obligations in due time and good manner under the Agreement and the government laws.

5. Dispute Resolution

- 5.1 The present Agreement is being explained according to the Georgian legislation in force.
- 5.2 Disputes between the parties are being resolved based on mutual negotiations. In case they do not reach the agreement, the disputes will be considered in the court, according to the Georgian legislation in force.

6. Confidentiality

- 6.1 The information, acquired by the parties while cooperation is considered confidential and it is not permitted to give it out to third parties, without prior written consent of the other party. The parties should provide the protection of the information on correspondence and other business documentation from third parties.
- 6.2 The parties should keep within the rule even after the agreement termination.
- 6.3 In case the confidential information giving to third parties (apart from the legally stipulated cases), the breaching party should compensate any penalty to the other party, which is defined by the other party.

7. Force-majeure

- 7.1 The parties will not be obliged to fulfill the duties in case the force-majeure circumstances take place.
- 7.2 After the force-majeure circumstances end, the parties will agree on the new terms and conditions, according to the legislation in force.

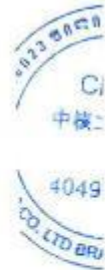
8. 8. The Agreement validity

- 8.1 This Agreement will enter into force on the date of signature by both Parties and will remain in force until 21 June 2022.
- 8.2 The Agreement can be prolonged upon mutual consent of the parties, in written.

9. Conclusive provisions

- 9.1 The parties are led by the mutual respect principle and deepening the cooperation wish.

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- 9.2 The parties of the Agreement are obliged to keep honest name, business reputation, dignity.
- 9.3 The present Agreement is drawn up in 2 (two) copies in English and Georgian languages, each having equal legal force, kept within the parties.

10. Requisites of the parties

Customer

Georgia Branch of China Nuclear
 Industry 23 Construction Co., Ltd
 Identification code: 404952789
 Address: Java 5 Street, Tbilisi, Georgia
 Tel: 571 195 115; 591 620 760
 Email: luoke222@gmail.com
 em23.georgiaofficial@cnec.com
 Director: Luoke



Executor

"Medical Technology" Ltd.
 Identification code: 404384590
 JSC "Procredit Bank"
 Bank code: MIBGGE22
 o/a: GE22PC0133600100053668
 Tbilisi, D. Agmashenebeli alley#12km clinic
 Lancet's building, room 305,
 Tel: 579 911 566; 593 96 00 26
 Email: medicalt@gmail.com
 Director: Gia Gogbeidze



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