Biannual Environmental Monitoring Report

Loan Number: 3063 -GEO

Project Number: 42414-043

Reporting period: **September, 2015 - February, 2016**

GEORGIA: SUSTAINABLE URBAN TRANSPORT INVESTMENT PROGRAM, Tranche 3

(Financed by the Asian Development Bank)

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ABBREVIATIONS

ADB	Asian Development Bank
EA	Executing Agency
EARF	Environmental Assessment and Review Framework
EIA	Environmental Impact Assessment
EIP	Environmental Impact Permit
EMP	Environmental Management Plan
EPSM	Engineering Procurement and Construction Management
GoG	Government of Georgia
SUTIP	Georgian Sustainable Urban Transport Investment Program
IA	Implementing Agency
IEE	Initial Environmental Examination
MDF	Municipal Development Fund of Georgia
MFF	Multi-tranche Financing Facility
MoENRP	Ministry of Environmental and Natural Resources Protection
MoRDI	Ministry of Regional Development & Infrastructure
SSEMP	Site-Specific Environmental Management Plan

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1. PART I. INTRODUCTION

1.1. Preliminary information

Program background

1. Upgrading and improvement of local transport and transport-related infrastructure plays a significant role in the development of Georgia's urban infrastructure. To this effect, a number of important activities have been implemented and financed from the budget of Georgia and from other sources. Recently several significant programs, financed through state budget, loans and grants, have been implemented with this regard.

2. On December 19, 2013 - Sustainable Urban Transport Investment Program Tranche 3 Loan and Project agreements were signed between Georgia and Asian Development Bank. Under Tranche 3, ADB has agreed to lend to the Borrower from ADB's ordinary capital resources an amount of seventy three million Dollars ($73 million). Tranche 3 is scheduled for completion by 30 June 2018, with a loan closing on 31 December 2018.

3. The program will provide efficient, reliable and affordable urban transport infrastructure and services, thereby increasing economic growth potential and competitiveness of urban communities, improving livelihoods of over 1.5 million people (approx. 35% of Georgian population). The project will also: (I) improve urban, environment and communities' access to economic opportunities and to public and social services; (II) promote efficient and sustainable urban transportation; and (III) generate income and employment opportunities.

4. The environment classification for Tranche 3 is Environmental Category B, as the subprojects under SUTIP 3 were classified as category B as the subprojects impacts are site specific and can be addressed through mitigation measures. Initial Environmental Examination (IEE) were required. The environmental categorization of sub-projects was conducted by using ADB's Safeguard Policy Statement (2009).

Program Area

5. Sustainable Urban Transport Investment Program – Tranche 3 (SUTIP T3) includes:

   (a) Construction of an approximately 6.8 kilometers 4-lane urban road link between the cities of Rustavi and Tbilisi, including a 2 kilometers urban boulevard and recreational areas;

   (b) Construction of an approximately 1.2 kilometers coastal protection structure in the city of Anaklia (Phase II); and

   (c) Project implementation support through financial audit and independent safeguards monitoring.

Tbilisi-Rustavi urban link (Section 2) CW Project description:

6. The project envisages Modernization of Tbilisi-Rustavi portion of the Tbilisi-Red Bridge (Azerbaijani border) automobile road. The design road links the capital of Georgia with the major industrial and administrative center Rustavi and the district center Gardabani. Designing and constructing of other

portions of the road will enable the citizens to travel and commodities to be trafficked on comfortable and modern highway to the capital of Azerbaijan Baku. Apart from the abovementioned, the population of Rustavi and Gardabani are the priority road customers. The mentioned portion of the design road is over-trafficked, the AADT being about 15,100 vehicles per day, when the road capacity is just 7,000. The latter determined priority of modernization of the Tbilisi-Rustavi road to the level of I category road with 4 traffic lanes and design speed 120 km/h (design speed is different from speed limit). Total length of the urban link is 18.1km.

7. **Anaklia Coastal improvement (phase 2) Project description:** Anaklia is a small town and seaside resort in western Georgia. It is located in the Samegrelo-Zemo Svaneti region, at the place where the Enguri River flows into the Black Sea, near the administrative border with Abkhazia. The project aims at Anaklia shoreline rehabilitation, restoration of the full profile of beaches to the possible limits (which is necessary for wave breaking and suppression of its power and assigns to the beach a function of bank protecting structure), selection of the most optimum types and design of hydro-technical coast protecting structures. Infrastructure improvement will support infrastructure inves*tments* to rehabilitate, improve and expand the beach of Anaklia and will benefit accrue principally from the protection of land and infrastructure from erosion and damage, the avoidance of some other costs and increasing number of tourists. For the interventions, benefits arise from the protection of (i) rural land, (ii) houses (iii) roads and other infrastructure. Coast protection measures need to be taken to protect the unique place and landscape. The design of approximately 4 kilometers of coastal line will create a new and attractive tourist destination on the Black Sea Coast, able to be the engine of the development of the region of Zugdidi, Ganmukhuri and Anaklia.

8. Project considers construction of 4 structures of underwater breakwaters (composed with 5t tetrapods) in the sea along the coastal line in around 200 m far from the beach and nourishment of the beach line with sand.

1.2. Construction activities and project progress during the reporting period

<u>Civil works</u> at Anaklia coastal improvement EPCM (Phase 2):

9. The contractor for the Phase 2 is the same as for the Anaklia Coastal Improvement phase 1 - Modern Business Group LLC (Azerbaijan). Civil works contract was signed with Modern Business Group LLC (Azerbaijan) on September 26, 2014 with an amount of GEL 12,252,937.48 (approximately USD 7.0 million). The construction works started on February 18, 2015. Official completion time for Phase 2 was determined 18 November, 2015. Significant delays have been experienced in the implementation of the project. Contractor, Engineer and MDF agreed to extend the civil works contract and signed Contract Amendment for time extension till 30 April, 2016.

10. According to the Contractor's schedule (agreed with MDF), construction started with N10 underwater breakwater. Contractor accomplished works on underwater breakwater N 10 on 21 September, 2015. The nourishment of the 300 m beach line is completed. This section was priority for the government to place the sand because of children's camp located in the same area and having high intensity of beach line erosion.

11. During reporting period following construction work activities have been carried out by the Contractor Company – Modern Business Group Ltd (Azerbaijan):

- Filling with stone in the sea – 1,468 m^3;
- Placing 5T TTP-units in the sea – 539 units;
- Sea bottom leveling – 747 m^2;
- Artificial Sand Nourishment works– 19,820 m^3;

12. Until now (01.03.2016) Contractor provided construction material for abovementioned work items from the Quarries:

- Natural quarried stone – 1.500 m^3;

13. Contractor procures construction materials - sand aggregates, quarry stones and etc. from the following licensed companies: Crushed rock from LTD "Pulsari", contract number HEC-09, LTD "Enguri+"-contract number -HEC-00 and "Big Energy" – contract number HEC-08/1; Sand- from company: "Lazika", Contract number HEC-12; Natural quarry stones -from company "Grupovia" – contract number HEC-07.

14. Physical progress of construction works by the end of February is 41.75%.

15. A deep-sea port is considered to be built in Anaklia, which is expected to interfere with the Anaklia coastal protection subproject Phase 2. At this stage, concept of the Sea Port is not finalized and approved. The Contractor procurement process that was anticipated to be concluded in October 2015, is still on-going and most likely will be completed in March 2016. MRDI and MDF took decision to hold tetrapod laying activities, limit them to breakwater N10 and stop the tetrapod casting activities. Decision on construction of additional breakwaters within Phase 2 (N8 and N9) will be made in March 2016 when the seaport contractor will be recruited, concept will be finalized and endorsed.

16. Thus, for the reporting period, contractor finished marine works only on underwater breakwater N10 by the end of September 2015, after what only sand nourishment works have been implemented. Since November 2015, no work activates have been fulfilled under Phase II. The official contractual time, as it was mentioned above, will expire on April 30, 2016. There is no extension of contract made yet officially (MDF and the Engineer are working on this issue). Thus, civil works envisaged by the contract will not be completed by the April 30.

Tbilisi-Rustavi urban link (Section 2) - N/A - No construction activities started yet under this project.

1.3. Changes in project organization and environmental management team

17. The MDF is the projects' executing, implementing and disbursing agency. MDF has overall responsibility for the projects' management - including environmental, planning and supervision. New Executive Director of MDF Juansher Burchuladze was assigned in July, 2015 by the Georgian Prime Minister's Decree.

18. MDF is responsible for general implementation of all safeguards tasks and guarantee that potential adverse environmental impacts arising from the Projects are minimized by implementing mitigation

measures presented in the environmental impact assessment ("EIA") or Initial Environmental Examination (IEE), as applicable.

19. Management of safeguards issues is carried out by the MDF through Environmental and Resettlement Unit, established in October 2014. From that time, number of Environmental and Resettlement team members has increased from 6 to 9 and currently consists of: Head of Unit, 3 environmental safeguards specialists, one safety specialist, one social and gender specialist, 2 resettlement specialists. There are also two ADB's individual consultants – one on environmental safeguards and one on resettlement issues, who are the members of Environmental and Resettlement Unit. Until October, Environmental and resettlement safeguards team was consisting of 3 environmental safeguards and 2 resettlement specialists, one of which was the ADB's national consultant on resettlement issues. Environmental and Social Safeguards team had a Team Leader who was an advisor to Executive Director of MDF on environmental and social safeguards issues.

20. The Environmental and Resettlement Unit is involved in addressing of environmental and social safeguard issues throughout the entire projects' cycles. The Environmental and Social Specialists of the MDF, are responsible for management of the environmental and social aspects associated with development of all donor funded projects for which MDF is the responsible Executing Agency (EA). Local Environmental Consultant, was hired from September 2015 and designated to supervise ADB projects, review the IEEs/EIAs, EMPs, and SSEMPs of projects and carry out supervision of the construction performance based on approved EMPs, EIAs, and environmental standards in accordance with ADB "Safeguard Policy Statement" (2009) requirements' and acting Georgian Legislation.

1.4. Relationships with contractors, owner, lender, etc

21. The main institutions that are involved in IEEs/EMPs/SSEMPs implementation and monitoring, are the executing agency (EA) - MDF, the Supervision Consultants' (SC), the Construction Contractors' and to a lesser extent the Ministry of Environmental and Natural Resources Protection and Municipal Authorities. EA (MDF) and SCs are responsible for ensuring monitoring of the projects' implementation at the construction stage. Ministry of Environmental and Natural Resources Protection has the authority for periodic audits but should not be considered as a party responsible for monitoring according to this IEE and EMPs.

Anaklia Coastal Improvement (Phase 2)

22. Construction Contractor of the project as it was mentioned above is 'Modern Business Group' Ltd (Azerbaijan). Construction activities are supervised by the DOHWA Engineering Co., Ltd (Republic of South Korea). Construction Contractor company has one National Environmental Specialist on site (Zurab Revazishvili). Environmental issues at Supervision Company are handled by National Environmental Specialist - Revaz Gujabidze, who is mandated to track implementation of EMP by contractor, reveal any deviations from the prescribed actions, as well as identify any unexpected environmental issues, emerged at any stage of works.

23. Construction Supervision Company is responsible for supervision of all environmental issues during project implementation. Construction contractor is obliged to follow EMP and SSEMP good construction practice during construction activities. All environmental issues, arising from the

construction activities are immediately brought to the attention of MDF's environmental safeguards team by the environmental specialists of construction and Supervision Companies' in order to coordinate efforts and ensure immediate mitigation of impacts, protect the environment and safeguard the health and welfare of the local communities. The construction contractor's Environmental specialist responsible for implementation of EMP/SSEMP, daily environmental monitoring and reporting.

24. Construction contractor is responsible to prepare monthly progress reports on SSEMP implementation, which should contain information on the main types of activities carried out during the reporting period, status of any clearances/permits/licenses which are required for carrying out such activities, mitigation measures applied, and any environmental issues that have emerged in relations with suppliers, local authorities, affected communities, etc.

25. Construction Supervision Company is preparing quarterly progress reports that cover the implementation of the SSEMP, discrepancies from the SSEMP and list all HSE relevant incidents and accidents that occur during the implementation.

26. MDF ensures availability of all environmental information and facilitates environmental supervision of the projects. The MDF through its local environmental consultant reports to the ADB every 6 months on the status of environmental compliance of construction works by EMRs.

Tbilisi-Rustavi urban link (Section 2)

27. Construction Contractor is not selected yet. Invitation for Bids (IFB) for TRURL was announced on 3 Feb 2016. The deadline for submission of bids is 21 March 2016. The detailed design and bidding document was reviewed by the road individual consultant recruited under SUTIP1. All comments were satisfactorily incorporated by the EPCM consultant and no further comments confirmation from the individual consultant was attached to the submission of the bidding document by MDF to ADB.

28. MRDI and MDF's intention is to expedite the evaluation process and secure contract award not later than by end of July, 2016. MDF Procurement Unit will mobilize the SUTIP-financed international and national procurement individual consultants to ensure quality and timely submission of TBER and FBER to ADB.

2. PART II. ENVIRONMENTAL MONITORING

29. Environmental monitoring measures include construction site supervision, verification of permits, monitoring of compliance of the contractor performance and specific monitoring of environmental impacts like noise, dust, soil and water pollution and air emissions, etc.

30. EMP is an integral part of construction contracts. MDF requires the Construction and its Supervision Companies to implement construction activities in accordance with the environmental management plan (EMP), which is the part of the initial environmental examination document (IEE) and included in the environmental assessment and review framework.

31. Environmental monitoring started immediately after the commencement of civil works under the SUTIP T3. Environmental safeguard monitoring is performed as required in the EMPs. MDF submits to ADB semiannual environmental safeguards monitoring reports, describing progress of implementation of EMPs and any compliance issues and corrective actions, within 1 month after each reporting period. If any unanticipated environmental and/or social risks and impacts will arise during construction, implementation or operation of the Project that were not considered in the IEE, the EMP, MDF ensures to promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan.

32. During reporting period construction works have been implemented only at **Anaklia coastal improvement sub project (phase 2)**. Therefore, the paragraphs below include information related to the mentioned SP.

33. As it was mentioned above, speed of construction works have been decreased significantly and no activities have been implemented since November, 2016. Because of decreasing the construction works pace, the posiblility of impact level on environment has felt to minimum.

34. No adverse environmental impacts related to the construction works were noted or observed within the reporting period. New tests for the sea water and atmospheric air quality were taken in February, 2016 (see attachment 4.3.) by the "Laboratory Research Center" Ltd. According to received data obtained results did not exceed the National Environmental Standard (Maximum Permissible Level), therefore no additional mitigations are required.

35. There are no protected areas, wetlands, mangroves, or estuaries or archeological/cultural heritage within the project area. There are no land acquisition and resettlement issues involved. The nearest residential house is located in 300-400m distance from the working yard. In order to limit soil disturbance, the access to the site was limited to construction workers and the site was fenced.

36. The following items were monitored during the implementation of the project by Contractor's and Engineer's environmental management specialists in accordance with SSEMP:

37. **Air Quality** :

- **Technique used for monitoring:** Visual control, technical check-up of machinery.
- **Frequency of monitorin**g: During the Tetrapod production and transportation operations; in dry weather on a periodic basis; during the installation of underwater breakwater; Technical check-up of machinery before works. Tests are taken in every 3month. Last test was taken on 04.02.2016 (see attachment4.3);
- **Target:** Ensuring compliance with the established quality norms of ambient air quality; Minimizing the impact on the population health; Ensuring the personnel's safety.

Dust was controlled through watering the access roads where driving could easily generate dust. During the transportation of contraction material, the trucks were covered with special tarpaulins or other cover means to avoid spreading of fine aggregated material in the air and although, the transportation of materials were carried out by initially selected and determined routs and the speed

of the trucks are limited. Wheels and undercarriage of haul trucks were clean and washed prior to leaving construction site.

38. **Sea water quality:**

- **Technique used for monitoring:** - Visual control; Supervision over the waste management and sanitary conditions; Surface water laboratory control.
- **Frequency of monitorin**g: Regular check-up and inspection; Laboratory control – as necessary (in case of oil spills). The tests are taken in every 3month. Last laboratory test for sea water was taken on 04.02.2016 (see attachment4.3).

Marine works for excavation and placing stones for leveling bottom of the sea preparing for placing TTP, have been carried out with extreme care from point of view spills, water turbidity, labor safety, taking into consideration EMP and SSEMP requirements and regulations. Vehicles fueling place is located approximately 300 m far from sea shore, adequate lining of the ground by concrete and confinement of possible operation and emergency spills are provided.

39. **Seawater turbidity**

- **Technique used for monitoring:** Visual control; Turbidity analysis.
- **Frequency of monitorin**g: Permanent visual control; identifying the degree of turbidity through analysis (in every 4 hrs. during the work).

During marine works - dredging, stone filling and placing TTP units - works were monitored for sea water turbidity level. During this works contractor environment specialist was visually controlling turbidity level, making test checks in every 4 hours. In case if the turbidity measured during marine works at a distance of 250 meters from the point of works exceeds the background turbidity by more than 250mg/l the Contractor would be instructed to take suitable measures to reduce the turbidity.

After starting installation of concrete TTP in the sea, tests of turbidity measuring were carried out according to above-mentioned standards regularly, until the completion of the works, September, 2016. No deviations from the standards have been identified during measuring.

40. **Underground water**

- **Technique used for monitoring:** Visual control of soil quality; Laboratory control of soil quality (in case of spills); Technical check-up of machinery.
- **Frequency of monitorin**g: Regular check-up; Laboratory control as necessary (in case of oil spills).

Fuel was kept in the covered containers at the impermeable surface area. Taking into consideration the specific characteristics of coastal protection project, there is no soil contamination in the scope of project. During the work activates on every day basis visual control has been conducted, no oils spills has been detected.

The places that could be the source of ground water contamination are fenced with ground and special material. Special filter was arranged around the concrete batching plant for accumulation of contaminated water.

41. **Soil contamination:**

- **Technique used for monitoring:** Visual control; Supervision over the waste management; Laboratory control over the soil quality; Technical check-up of machinery.
- **Frequency of monitorin**g: Regular check-up; Inspection after completion of works; Laboratory control as necessary (in case of oil spills);

Fuel was kept in the covered containers at the impermeable surface area. Taking into consideration the specific characteristics of coastal protection project, there is no soil contamination in the scope of project. During the work activates, visual control has been conducted on every day basis, no oils spills has been detected.

42. **Noise:**

- **Technique used for monitoring:** – Control, measuring, technical check-up of machinery.
- **Frequency of monitorin**g: Regular control (particularly during much "noisy" operations); Measuring (in case of grievance); Technical check-up of machinery before works. During the work activities on every day basis visual control has been conducted, no grievance or complains has been detected.

The plan of transportation routes and timing were agreed with local Municipality and patrol police since the project has started. Wheels and undercarriage of haul trucks were checked and fixed to maintain good vehicle condition not to make any noise and not to disturbed residential people, even though there are no residential people within 1km range.

Drivers were informed to limit speed to 20-25 km/h to avoid use of horn in the town. Local population was informed about project works. The Contractor was working during night time to catch up schedule but according to supervisor's instruction, materials were transported during the day time. According to the works schedule, not more than 5-6 trucks were working at the same time and the noise created from them were not exceeding the limitation.

43. **Waste**

- **Technique used for monitoring:** Visual control of the area; Control over the waste management.
- **Frequency of monitorin**g: Regular check-up and inspection; After completion of works.

At construction site, produced waste was stored at special storing areas designated for hazardous, domestic and construction waste storage. The part of construction waste (inert materials) was used by contactor for secondary meanings. Regarding the hazardous waste, such as oil contaminated towels or oil contaminated soil, Contractor was accumulating them separately in special containers. Hazardous waste was removed from construction site by authorized personal only in accordance with safety regulations.

Contractor Company had relevant contracts with licensed companies for proper management and final disposal of waste. Construction company had signed contracts with the companies for waste removal. For hazardous waste: Ltd "Sanitari" (contract N2911-13) and "Sandasuptaveba"; For domestic waste: an agreement with Zugdidi municipality; Construction waste: "Georgian Solid waste management company" (contract N4). (See attachments).

44. **Labor Safety**

- **Technique used for monitoring:** Inspection; Availability of personal protection equipment and periodic control over their good maintenance; Control over the meeting the requirements for labor safety.
- **Frequency of monitorin**g: Before the works; Periodic control during the works.

Construction activities are performed according to the construction safety requirements and regulations.

45. **Flora and Fauna** - The flora and fauna living in Samegrelo region is located out of the project area and thus the project activities has no impact on them;

46. There are no trees, vegetation, bushes, plants, land and sea animals in the project area, as sandy coasts with the hot sun, salty water and wind are not convenient environment for living organisms. Therefore, there are few living organisms on the coast surface: crawfish and low plants in the coastline. Thus, construction activities have no impact on flora and fauna.

Sea biodiversity – During marine works, loss of Bio ecology is expected (sea plants), but because of insignificant Influence no specific mitigation measures are required. Only permanent visual control, identifying the degree of turbidity through analysis (in every 4 hrs. during the work) during the works are needed. If the degree of the water turbidity is in excess of the admissible limit (25 gr/l), the works must be stopped and relevant corrective measures must be taken. During the works on underwater breakwater N10 (until the completion works in September 2015) contractor was taking measurements for turbidity on every day basis, no problems have been detected.

47. **Landscape structure -** Construction activities do not make any impact on the landscape of the territory.

48. **Social Environment** - There is no any adverse impact on social environment as the nearest residential house is far from 400-500m. The intensity of traffic caused by the Contractor's transporting equipment was not increased too much, around 3 trucks in every 2 hours; it means that not air contamination or noise was caused. Positive aspect is that the local residents almost 90% of people employed by the Contractor Company are locals.

49. **Worker Camps**

The potential impacts related to the construction and operation of the camp could be summarized as follows:

- Potential damage of topsoil;
- Contamination related to fuel storage and fuelling operations;
- Waste management;
- Wastewater and sanitation.

Mitigation Measures

The construction camp shall be equipped with a biotoilet and other necessary infrastructure.

The potential impacts related to the construction and operation of the camp could be summarized as follows:

- Potential damage of topsoil;
- Contamination related to fuel storage and fuelling operations;
- Sewerage related contamination;
- Waste management.

3. PART III: ENVIRONMENTAL MANAGEMENT

3.1. The environmental management system (EMS), site-specific environmental management plan (SSEMP) and work plans

Anaklia Coastal Improvement project (phase 2)

50. IEEs, including EMPs, are integral parts of the contracts and their implementation is mandatory for contactors. Contractor Company, as it was mentioned above, submits monthly progress reports to Supervisor Company "Dohwa" and MDF. Monthly report includes chapter on environmental performance. Consultant Company "Dohwa" prepares quarterly environmental reports and submits to MDF on progress of the environmental management plan.

51. An environmental assessment and review framework was approved by the government of Georgia on 16 April 2010. Document was updated in April 2015. The environmental classification for Tranche 3 under ADB's Safeguard Policy Statement *(*2009) is B as its subprojects will not have significant (sectioirreversible or permanent negative environmental impacts during or after construction.

52. The initial environmental examinations (IEE) for Anaklia Coastal Improvement (phase 2) was prepared. Implementation of all mitigation measures during construction activities under the project are monitored. IEE including EMP are integral part of the contract and their implementation is mandatory for contactors. The environmental management plans (EMP) will be updated by construction contractor(s) and submitted to the supervision consultant for approval if necessary.

53. SSEMP has been prepared by Construction Company and endorsed by Supervision Consultant Company in June, 2015.

Tbilisi Rustavi Urban Road Link (section 2)

54. EPCM consultant JV "Dohwa Engineering ltd" (Korea) and "Transproject ltd" (Georgia) prepared the first draft of detailed design which was submitted to MDF on July 30, 2013. Detailed design was amended according to the comments and recommendations given by the International Road Consultant, Georgian Expertise and MDF.

55. During project preparation, substantial design improvements were made so as to mitigate impact of the road section on affected households and businesses. Where the road runs adjacent to existing apartment buildings, an urban boulevard was included in the project including landscaped verges on either side. It will provide a well-integrated relationship with the adjoining residential area. Landscaped park between the road and the nearby buildings, comprising tree plantation, footpath,

bicycle path, playground, and pedestrian footbridges to access the riverside and new riverside gardens will provide a community recreation area. Separated and regulated traffic flow, combined with the boulevard development, lighting, and controlled access to the riverside, will provide a safe environment. Lower speed limits (80 km/h) in this area will also reduce potential noise, vibration, and other potential impacts on the adjoining and nearby properties.

56. Final Detailed Design of the project was submitted to MDF in September 2015. The detailed design and bidding document was reviewed by the road individual consultant recruited under SUTIP1. All comments were satisfactorily incorporated by the EPCM consultant and no further comments confirmation from the individual consultant was attached to the submission of the bidding document by MDF to ADB. Invitation for Bids (IFB) for TRURL was announced on 3 Feb 2016. The deadline for submission of bids is 21 March 2016.

57. Tbilisi-Rustavi Urban Road Link Section 2 project was tendered out after finalization of the detailed design, which reflected the results and recommendations of the structural integrity survey of 10 apartment buildings, dynamic noise and vibration modeling. As agreed with ADB, MDF has conducted the structural and geotechnical diagnosis of 10 multi-story residential apartment buildings. These buildings are approximately 50-years old and in a visually poor state of repair. Although they are outside the right-of-way of section 2 and not directly physically impacted by the project, concerns have been raised by the residents regarding potential noise and potential adverse structural effects of vibrations during construction.

58. As required by the IEE, a technical study to address these concerns was undertaken. Noise mitigation measures (noise barriers) were already envisaged in the project detailed design that was finalized after the noise modeling has been performed. In order to mitigate the construction noise impacts temporary noise barriers will be installed along the design road (as required by the IEE) near the apartment buildings (section B). Noise abatement during construction will require use of about 120m of temporary noise barriers.

59. Dynamic modeling of vibrations during construction were also performed to verify that the integrity of the building will not be affected, or to include some of the buildings in the LARP if partial demolition becomes necessary. The ADB project team (including Social Safeguards Specialist) closely and regularly worked with MDF since early 2014 (involvement of GRM staff, RETA consultant, safeguards missions, loan review missions, and videoconferences) and provided guidance on these critical issues. Action plan has been defined (monitored and updated) and support was given (compliance with ADB SPS and in drafting the terms of reference for the structural diagnosis assignment, in line with international standards). The Italian firm Nord Est Progetti S.r.l. completed its work with the submission of their final report to MDF in Q3 2015. After completion of the additional studies dedicated to assessment of noise and vibration impacts on the apartment building and residents of these buildings, a public consultation meeting has been conducted with the representatives of the affected apartments. The meeting has been conducted on September 15, 2015 at MDF.

60. The report provided three important conclusions: (i) vibration produced during construction works will not cause risk of damage to the buildings; (ii) during road operation, there will be no impact on buildings that could result in any damage (except for one building which was already anticipated to be demolished and was included in the LARP and covered under the LARP prepared in 2013); and (iii) conformity with the threshold of permissive noise level can be achieved through the design of

appropriate noise barriers. As a result, state-of-the-art noise barriers, made from transparent material, will cut traffic noise to acceptable levels while ensuring views from lower level apartments remain unobstructed and have been included in the project. In addition, a rigorous and extensive monitoring system will be implemented during the construction phase and will extend into the operation phase of the road, to provide added comfort and assurance of the absence of adverse impact on the stability of your building and other buildings located along the highway. Contractors will work according to strict, pre-defined procedures and will use only approved construction equipment. MDF ensured that relevant provisions are included in the bidding document, fully consistent with the recommendations in the report.

61. The final draft of IEE has been prepared and presented to MDF by the end of September 2015. IEE was finalized on the basis of the conclusions of the above mentioned studies. IEE was approved by ADB project team and disclosed in December, 2015.

62. Following the award of the contract and prior to construction commencing the Contractor will review the EMP and develop a **Site-Specific Environmental Management Plan/s (SEM**P/s) that amplifies the conditions established in the EMP that are specific for the project, the tasks involved and schedule of construction activities. The SEMP/s will identify persons who will be responsible for supervising the work within the contractor's team. The SEMP will include a matrix of mitigation measures corresponding to specific activities. Construction of the temporary noise barriers will be implemented according to the design prepared by Supervision Company (SC). Contraction Company will consider the possibility to install these barriers before starting of any construction activities.

3.2 Site inspections and audits

63. Site supervision and inspections, as well as monitoring of compliance of construction activities are important aspects to ensure the proper implementation of EMP/SSEMP requirements. Environmental management team of Construction and Supervisor Companies carry out permanent supervision activities and monitoring of the project performance on regular bases.

64. 9 site visits were conducted by the environmental specialist of Supervisor Company during reporting period and 6 non-compliance notices have been issued by him. All non-compliances have been fixed by the contractor in required time.

65. Environmental Specialist of Construction Company is permanently on site and implementing daily inspections of construction activities on regular bases. Inspection is carried out by Environmental Specialists in accordance of check-lists. Filled check-lists are available at camp site.

66. MDF's Environmental team was ensuring that the Contractors understand what is to be done to rectify and address any environmental issues raised during project implementation process.

3.3 Noncompliance notice and corrective actions

Tbilisi-Rustavi Urban Road Link (section 2)- N/A yet, as no construction activities started yet.

Anaklia Coastal Improvement Project (Phase 2)

67. Identification of problematic issues and noncompliance notice during site inspections is the responsibility of Environmental Specialist of Superviion Consultant. During reporting period the number of site visits has been implemented by environmental specialists of Construction and Supervision Companies in order to check environmental compliance of construction works.

68. In case of any deviations of EMP and SSEMP requirements corrective actions and mitigation measures are applied. All mitigation measures during pre- and construction phases of SPs are implemented by construction contractors according to EMP and SSEMP.

69. Non-compliances and Problematic issues observed during reporting period and their current statuses are provided in the table below:

Non-Compliance notices and corrective actions for Anaklia Coastal Improvement Project (Phase 2)

Date of submission	Description of Non-Compliance	Area	Corrective action required including deadline	Performance Date of Corrective actions
05.09.2015	**Watering of working yard -** Watering of working yard hasn't implemented.	working yard	Watering should be implemented on every day basis	**Corrected on 05.09.2015**
18.09.2015	**Domestic Waste-** Domestic waste has not been removed on time.	working yard	The domestic waste should be removed on time.	**Corrected on 18.09.2015.**
11.10.2015	**PPE Equipment-**All workers must have PPE equipment. Delay in replacing of old PPE equipment.	working yard	Staff member should be equipped with safety equipment and uniform urgently.	**Corrected on 11.10.2015.**
23.10.2015	**Safety briefing** -Safety briefing has not been conducted in a daily basis.	working yard entry	Safety briefing should be conducted next day	**Corrected on 24.10.2015.**
02.11.2015	**Warning signs -** Working area must be indicated with warning signs. Because of bad weather, warning signs has been damaged and replaced.	working yard	Warning signs need to be repaired ASAP	**Corrected on 02.11.2015.**
14.11.2015	**Domestic Waste-** Domestic waste has not been removed on time.	working yard	The domestic waste should be removed on time.	**Corrected on 14.11.2015.**

3.4 Consultation and Complaints

Grievance Redress Mechanism (GRM)

Anaklia coastal improvement project

70. In order to provide a direct channel to the affected persons for approaching project authorities and have their grievance recorded and redressed in an appropriate time frame, Grievance Redress Mechanism was established with efforts of MDF.

71. Complaints' registration journal is created and available at Anaklia construction site. The copy of journal with mobile numbers of relevant persons – Mr. Archil Samushia, (Site Manager of Construction Company), to be addressed is placed at local Municipality as well. Complaints' from the local people, regarding the environmental safeguard issues in case of their disturbance and inconvenience, because of improper or inadequate implementation of EMP, can be accepted in both places. Complaints' will be registered in database system, assigning compliant number with date of receipt. Complaints' will be investigated and complainant will be informed about time frame in which the corrective action will be undertaken, in case if the raised problem is realistic. Thus every complain will be indicated in **Complaint Logbook,** and problems will be solved in accordance of rules and regulations under the control of the supervising site manager and DOHWA's local Environmental Specialist (Revaz Gujabidze), and if necessary with involvement of MDF side as well. None of complaints have been raised and registered during reporting period.

Tbilisi-Rustavi Urban Link -section II

72. No civil works has been started yet within the project. After starting the implementation of the Project, there might be several issues related to environmental hazards and disputes on entitlement processes may occur due to the Project's activities. For example, intensive schedule of construction activities, inappropriate timing of construction vehicle flow, waste, noise and air pollution from construction activities, ecological disturbances are some of the environmental issues that might arise from the Project activities.

73. Grievance redress procedure for the projects aims to provide an effective and systematic mechanism in responding to queries, feedbacks and complaints from affected persons (AP), other key stakeholders and the general public. APs will be fully informed of their rights and of the procedures for addressing the complaints whether verbally or in writing during consultation, survey, and time of compensation.

74. In order to ensure that grievances and complaints are addressed in a timely and satisfactory manner and that all possible avenues are available to APs to air their grievances, Complaints Log books will be established at construction sites and MDF office, where complaints can be registered in special journal. The copy of complaints log journal with mobile numbers of relevant persons can be placed at local Municipalities as well. A grievance register will be maintained at each of the locations above to record grievances and keep track of their status.

75. APs or other concerned individuals may visit, call or send a letter, fax or e-mail to any of the Grievance Focal Points to register their comments or complaints related to environmental impacts or other aspects of the project. A grievance register will be maintained at each of the locations above to record grievances and keep track of their status. Grievances will be logged into an electronic register (MS Excel or similar) by the Secretary of Grievance Redress Committee (GRC) in MDFG. Acknowledgement of grievance registration will be provided to complaining party within maximum 7 calendar days following the receipt of the grievance. Review of the grievance will typically involve the verification of the compensation dossier, survey and valuation forms, and possibly site visit and interview of the complainant and other interested parties, such as neighbours or other people involved in the grievance.

76. A resolution proposal will be drafted and communicated formally to the complainant, with a signed acknowledgement of receipt. If the resolution is satisfactory to the complainant and other aggrieved or interested parties, the minutes of agreement will be drafted for signature by all interested parties. If the resolution is not satisfactory to the complainant and other aggrieved or interested parties, the proposed resolution letter will include information on the possibility to resort to the next tier of grievance resolution process.

77. Efforts will be made to prevent and amicably resolve grievances rather than going through a legal redress process. This can be achieved through, ensuring full participation and consultation with the project affected persons, and establishing extensive communication and coordination between affected communities, EA, and relevant local governments, as necessary.

78. First, complaints resolution will be attempted informally at the community level with the involvement of community authorities and/or informal mediators. At these levels Grievance Focal Points to deal with project related grievance cases will be nominated. If the issue cannot be resolved within two weeks, it will be passed to the MDFG for review and resolution.

79. Second, complaints resolution will be attempted at the level of MDFG. If after the MDFG intervention no solution has been reached and if the grievance redress system fails to satisfy the APs, they can pursue further action by submitting their case to the appropriate court. Nevertheless, abovementioned grievance mechanism does not limit the citizen's right to submit the case to the court of law just in the first stage of grievance process.

Complaints

Residents of Nine Storey Building

80. A complaint was lodged with the ADB's Complaints receiving officer by 3 of residents of the nine storey building in the Ponichala district which is not included in the LARP. The complainants assert that the project may subject their building to damage and will significantly affect their everyday lives. They request that the influence of the proposed road on their apartment block be reviewed and alternatives be proposed, regardless of the project features and mitigation measures in the IEE. This complaint is currently at the stage of determining eligibility for compliance review.

3.4. Action plan for the next period

81. Next EMR for period January-June, 2016 will be submitted in July, 2016 (at the same time as EMRs for SUTIP 1 and 2) and will cover the period of March-June, 2016, as it was agreed during the Mission conducted in May 4-11, 2016.

4. Annexes

4.1 Monitoring Data

Anaklia Coastal improvement Project

Object of Monitoring	Control/Sampling Point	Technique	Frequency/Time	Target	Entity responsible for Monitoring
1	2	3	4	5	6
Atmospheric air	Business yard, Construction sites	• Visual control • Technical check-up of machinery • Laboratory Checks every tree month.	The monitoring of the Atmospheric Air quality is been carried out by contractor environmental specialist on every day basis and by supervising environmental specialist. During the transportation operations, in dry weather on a periodic basis, technical check-up of machinery before works, during the installation of underwater breakwater. Laboratory test are taken in every three month. Tests were taken on 04.02.2016 (See Annex 4.3). During this period no problems has been detected.	• Ensuring compliance with the established quality norms of ambient air quality; • Minimizing the impact on the population health; • Ensuring the personnel's safety.	Construction Contractor
Noise	Business yard Construction sites The nearest receptor (residential houses)	• Control; • Measuring; • Technical check-up of machinery.	Monitoring of the construction process noise level has been carried out by contractor environmental specialist on daily bases and by supervising environmental specialist. Regular control (particularly during with noisy operations); Measuring (In case of	• Ensuring compliance with health and safety norms; • Minimizing the population disturbance; • Ensuring comfortable working conditions for the workforce.	Construction Contractor

			grievance); Technical check-up of machinery before works. The nearest receptor (residential houses) is approximately 400-500m away from construction site, drivers are maintaining the safe speed limits 30 km/h on main roads and 10 km/h on construction site, there for no noise complains has been detected. During this period no grievance or problems have been detected.		
Soil	Construction camp - Material and waste storage areas; Construction sites	• Visual control • Supervision over the waste management; • laboratory control over the soil quality; • Technical check-up of machinery.	Monitoring of the construction process soil mitigation level has been carried out by contractor environmental specialist on daily basis and by supervising environmental specialist. Laboratory control – as necessary (in case of oil spills). Material and waste storage areas are indicated and isolated. During this period no problems has been detected. Regular check-up; Inspection after completion of works;	• Preserving the soil stability and quality; • Minimizing the impact on other receptors depending on the soil quality (vegetation cover, holiday-makers, etc.).	Construction Contractor

Increased seawater turbidity	Sites in the sea where the sand removed during the seabed treatment and from the seabed is to be placed.	• Visual control; • Turbidity analysis	Monitoring of the Increased seawater turbidity level is been carried out by contractor environmental specialist on daily basis and by supervising environmental specialist. Permanent visual control; Identifying the degree of turbidity through analysis (in every 4 hrs. During the work). Upon intensive commencement of works in the sea, water testing has been conducted together with turbidity control, which should be constantly ongoing.	• Maintaining ichthyofauna and microphytes.	Construction Contractor
Underground water	Construction camp - Material and waste storage areas; Construction sites Gas station	• Visual control of soil quality; • Laboratory control of soil quality (in case of spills); • Technical check-up of machinery.	Monitoring of the underground water mitigation level has been carried out by contractor environmental specialist on daily bases basis and by supervising environmental specialist.Regular check-up; Laboratory control as necessary (in case of oil spills). Material and waste storage, Gas station areas are indicated and isolated. During this period no problems or oil spills has been detected	• Guaranteed protection of the underground water quality	Construction Contractor
Surface water: the	Constructio n ground	• Visual control;	Monitoring of the Surface water	• Protecting the water quality in	Construction Contractor

Black Sea, the rivers Kitori and Enguri	Business yard	• Supervision over the waste management and sanitary conditions. • Surface water laboratory control.	mitigation level is been carried out by contractor environmental specialist on every day basis and by supervising environmental specialist Regular check-up and inspection; Laboratory control – as necessary (in case of oil spills).Sea water Laboratory test are taken in every three month. Tests were taken on 04.02.2016 (See Annex 4.3). During this period no problems has been detected	the river; • Reducing the impact on the receptors (water biodiversity, etc.) depending on the river water quality.	
Negative visual impact	Construction camp - Material and waste storage areas;Construction sites	• Visual control; Supervision over the waste management and sanitary conditions.	Monitoring of the negative visual impact has been carried out by contractor environmental specialist on every day basis and by supervising environmental specialist Regular check-up and inspection; After completion of works. During this period no problems has been detected	• No dissatisfied population; • No dissatisfied pedestrians.	Construction Contractor
Waste	Business yard and/or adjacent area;	• Visual control of the area;] • Control over the waste management.	Monitoring of waste management issues is been carried out by contractor environmental specialist on daily bases and by supervising environmental specialist. Regular check-up and inspection; After completion of works. Construction	• Protection of soil and water quality; • Reduce the risk of negative visual impact; • No dissatisfied population.	Construction Contractor

			waste is accumulated on construction site in special isolated areas divided by hazardous, domestic and construction waste. Construction company has signed contract with the companies for waste removal. Waste has been removed from construction site buy authorized personal only in accordance of safety regulations. The waste is removed from construction site by authorized personal only in accordance of safety regulations.		
Labor safety	Working ground	• Inspection; • Availability of personal protection equipment and periodic control over their good maintenance; • Control over the meeting the requirements for labor safety.	Monitoring of the labor safety issues has been carried out by contractor environmental specialist on daily based and by supervising environmental specialist. Before the works;Periodic control during the works.Some of the labors don't have PPE equipment problem detected by supervising environment specialist and corrected	• Ensuring compliance with health and safety norms; • Avoiding/minimizing traumatism.	Construction Contractor

4.2 Implementation report on the environmental impact assessment (EIA)/initial environmental examination (IEE)/Site Specific Environmental Management Plan (SEMP) mitigation requirements

Reference	Requirement	Action to date	Action required/comment
Sea water pollution	The construction activities must be accomplished only in dry weather to avoid the pollution of the water currents; The construction activities must be accomplished by observing relevant safety measures; the materials and waste must not be in uncontrolled way over the site, etc. Locating the construction machinery and other equipment at a distance of at least 50 m from surface water bodies (where possible. If this seems impossible, taking permanent control and safety measures to avoid water pollution); Prohibition of washing of vehicles and other machinery near surface water bodies - The vehicles and equipment are recommended to wash by using commercial washing services; Limiting fueling and/or maintaining the vehicles/equipment to the	All works has been accomplished only in dry weather working conditions. All construction materials and machinery has been located 50 M away from surface of the water. All equipment and machinery has been maintained in good working conditions. The construction waste has been accumulated in special designated areas away from the water bodies and removed buy authorized personal only. On site environment specialists are maintaining visual monitoring for oils spills and equipment conditions, no accidents has been detected. Working Personal is being instructed on environment and safety issues rules and regulations. Sea water Laboratory test was taken twice in accordance SSEMP requirements.	Monitoring of the Surface water mitigation level is been carried out by contractor environmental specialist on every day basis and by supervising environmental specialist Regular check-up and inspection; Laboratory control – as necessary (in case of oil spills). Sea water Laboratory test are taken in every three month. Tests were taken on 04.02.2016 (See Annex 4.3). During reporting period no problems has been detected.

	specially designated places only; The equipment and vehicles should be maintained in good working order to avoid the risk of spills of fuel/lubricants; Expedient materials and waste management; The waste generated during the works will be collected and temporarily stored at the specially designated places, distanced from the water bodies; In case of fuel/oil spills, locating and spilt material and cleaning the polluted area immediately to avoid long soil pollution; Installing drainage systems around the areas with the potential pollutants of surface flows (e.g. along the perimeter of groudn or construction materials storage areas); Instructing the personnel on the environmental and safety issues.		
Pollution of underground waters	Control for the Pollution of underground waters must be maintained in the areas like: Construction camp - Material and waste storage areas; Construction sites, Gas station.	All works has been accomplished only in dry weather working conditions. All construction materials and machinery has been located 50 M	Monitoring of the underground water mitigation level is been carried out by contractor environmental specialist on every day basis and by supervising environmental specialist

	Taking all measures to avoid the deterioration of the seawater quality.	away from surface of the water. All equipment and machinery has been maintained in good working conditions. The construction waste has been accumulated in special areas away from the water bodies and removed buy authorized personal only. On site environment specialists are maintaining visual monitoring for oils spills and equipment conditions, no accidents has been detected. Personal is being instructed on environment and safety issues rules and regulations.	Regular check-up and inspection; Laboratory control – as necessary (in case of oil spills). Regular monitoring has been carried out to provide guaranteed protection of the underground water quality. During this period no problems has been detected
Noise	The equipment and vehicles should be maintained in good working order; Driving the vehicles at optimal speeds; Instructing the personnel (particularly, the drivers of vehicles and techniques); Registering and responding to grievances (if any); Driving the vehicles along optimal routes and at optimal speeds; Switching off the vehicle drives or running at minimal speed when the	On site Environmental specialists are conducting visual control (on regular basis) of soil quality, laboratory control of soil quality (in case of spills) no oil spills has been detected, technical check-up of machinery.	Monitoring of the construction process noise level is been carried out by contractor environmental specialist on every day basis and by supervising environmental specialist. Regular control (particularly during much “noisy” operations); Measuring (In case of grievance); Technical check-up of machinery before works. The nearest receptor (residential houses) is approximately 400-500 m away from construction site, drivers are maintaining the safe speed limits 30 kph on main roads and 10 kph on construction site, there for no noise complains has been detected. During this period no grievance or problems has been detected

	vehicles are not used; Carry out noisy operations during day time; Reaching preliminary agreement with the population living near the road about particularly noisy works.		
Dust	Watering of the non-asphalted ground or bare ground surfaces once in four hours on working days and in dry or windy weather; Observing the rules for storing the fill construction material to avoid their dusting in windy weather; Covering the lorries with tarpaulin when transporting loose materials, when there is probability of dusting; Taking necessary precautions (e.g. avoiding throwing the materials from heights when unloading them) to avoid excess dust emission during the earthworks and loading and unloading the materials; Driving the vehicles at optimal speeds; Washing the vehicle tires (recommended to use commercial services for this purpose);	All vehicles are maintained in good working conditions. Drivers are instructed to follow the limitations of driving speed (On construction site 10 km/h, 30 km/h on main roads). All noisy operations have been carried out during day time. No grievance has been detected concerning noisy works.	Measuring (In case of grievance); During this period no grievance or problems has been detected. Technical check-up of machinery before works. The nearest receptor (residential houses) is approximately 400-500 m away from construction site, drivers are maintaining the safe speed limits 30 km/h on main roads and 10 km/h on construction site, there for no noise complains has been detected. Watering working yard on every day basis. On 05.09.2015, watering of working yard hasn't implemented on time (See Non-Compliance notices and corrective actions). Corrected on 05.09.2015.

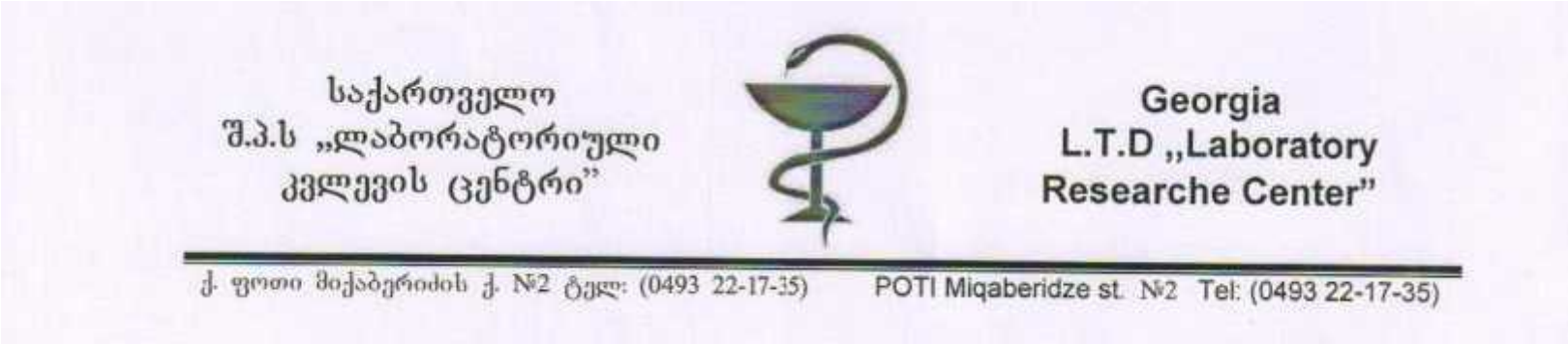
	Instructing the personnel (particularly, the drivers of vehicles and techniques); Registering and responding to grievances (if any); Driving the vehicles along optimal routes and at optimal speeds; Switching off the vehicle drives or running at minimal speed when the vehicles are not used.		
Waste	Visual control of the area; Control over the waste management. Protecting soil and water quality; Reducing the risk of negative visual impact; No dissatisfied population.	Monitoring of waste management issues is being carried out by contractor environmental specialist on every day basis and by supervising environmental specialist. Regular check-up and inspection; Construction waste is accumulated on construction site in special isolated areas divided by hazardous, domestic and construction waste. Construction company has signed contract with the companies for waste removal. The waste is being removed from construction site buy authorized personal only in accordance of safety regulations.	On 18.09.2015 and on 14.11.2015 has been detected wasted related issue, which has been corrected immediately in accordance of all rule and regulations (See Non-Compliance notices and corrective actions). Corrected on 18.09.2015. Corrected on 14.11.2015.
Vibration	The equipment and vehicles should be maintained in good working order; Driving the vehicles at optimal	Watering of the roads has been carried out by the contractor on every day basis. All lorries have been covered buy tarpaulin to	Monitoring of the construction process soil mitigation level (including dusting problems) is been carried out by contractor environmental specialist on

	speeds, particularly in the settled areas; Instructing the personnel (particularly, the drivers of vehicles and techniques); Registering and responding to grievances (if any); Driving the vehicles along optimal routes and at optimal speeds; Switching off the vehicle drives or running at minimal speed when the vehicles are not used; Carry out noisy operations during day time;	avoid dusting. Drivers are instructed to follow the limitations of driving speed (On construction site 10 km/h, 30 km/h on main roads). No grievance has been detected.	every day basis and by supervising environmental specialist. Regular check-up; Inspection after completion of works; Laboratory control – as necessary (in case of oil spills). Material and waste storage areas are indicated and isolated. During this period no problems has been detected.
Air Pollution of emissions	The equipment and vehicles should be maintained in good working order; Driving the vehicles along optimal routes and at optimal speeds; Switching off the vehicle drives or running at minimal speed when the vehicles are not used. Instructing the personnel before the start-up of the works.	All vehicles are maintained in good working conditions. Drivers are instructed to follow the limitations of driving speed (On construction site 10 km/h, 30 km/h on main roads). All noisy operations have been carried out during day time. No grievance has been detected concerning vibration. Air Pollution laboratory test was taken twice in accordance SSEPM requirements.	Monitoring of the construction process for air pollution is been carried out by contractor environmental specialist on every day basis and by supervising environmental specialist. Technical check-up of machinery before works. The nearest receptor (residential houses) is approximately 400-500 m away from construction site, drivers are maintaining the safe speed limits 30 kph on main roads and 10 kph on construction site, there for no noise complains has been detected. Laboratory test are taken in every three

			month. Tests were taken on 04.02.2016 (See Annex 4.3). During this period no problems has been detected.
Disturbance of the seawater during installation of tetrapods	During the works to level the seabed, permanent seawater analyses are needed to identify the degree of the water turbidity; If the degree of the water turbidity is in excess of the admissible limit (25 gr/l), the works must be stopped and relevant corrective measures must be taken.	Monitoring of the Increased seawater turbidity level is been carried out by contractor environmental specialist on every day basis and by supervising environmental specialist. Permanent visual control; Identifying the degree of turbidity through analysis (in every 4 hrs. During the work). Upon intensive commencement of works in the sea, water testing has been conducted together with turbidity control, no problems has been detected.	During installation of TTP units environmental specialists are conducting visual control, taking turbidity analysis. No increased seawater turbidity has not been detected.

Labor safety	Site -Inspections; Availability of personal protection equipment and periodic control over their good maintenance; Control over the meeting the requirements for labor safety. Ensuring compliance with health and safety norms; Avoiding/minimizing traumatism.	Monitoring of the labor safety issues is being carried out by contractor's environmental specialist on every day basis and by supervising environmental specialist. Before the works; Periodic control during the works. Some of the labors don't have PPE equipment.	On 11.10.2015 Delay in replacing of old PPE equipment. (See Non-Compliance notices and corrective actions). Corrected on 11.10.2015.

4.3 Atmospheric air and Sea water test results.



Air Test Result

Name of employer JSC "Hydro Engineering Company"
Sample Description: Air
Sample Location Construction of coastal Protection Facility in Anaklia
Research Objective: Bacterial and Chemical Indication
Date of sample collection 04.02.2016

Bacterial and Chemical Indicators	Discovered Composition	Maximum Permissible Concentration
Mesophiles and Micro Particles	40 p.u.	100 p.u.
Dust	0,14 gr/l	0.2 gr/l
Background radiation	0,01 micro/h	

Performer: Physician Laboratorian: R. Komakhidz The Laboratory Supervisor: L.mamaladze Result date: 08.02.16

The Act of Test Result № 111

„08„ February„ 2016

Client: L.T.D „Hydro Engineering Company"

Sample Description: Sea Water

Sample Location: Time. The number of Act №114; The Construction Site, Anaklia; 04.02.16, 12^{00} o'clock.

Description of Normative Document: Government Resolution of Georgia №425 31.12.13. Technical Resolution for the Protection of Surface Water from the Pollution: Resolution of the Government of Georgia №26 03.01.2014:

Technical Resolution for the Approval Regulations of Taking Sea Water test sample.

Starting and completion Date, Time: 04.02.16, 08.02.16.

The Act of Test Result have been given for the submitted sample:

Chemical Indicators

	Description of Specific Characteristics	Detected Concentration	Documentation of Technical Normative
	Smell	-	GOSTI 3351-74
	Turbidity	-	GOSTI3351-74
	Colour	10 cm is not in column	GOSTI3351-74
	Hardness	-	GOSTI 4151-72
	Calcium	-	LURIA PG.118
	Mg	-	LURIA PG.122
	Hydrogen Indicators	-	ISO 10523-08
	Dissolved Oxygen	-	LURIA GV.176
	Oxygen's Chemical Requirement	-	LUIA PG.74
0	Biochemical Usage of Oxygen. Usage of Oxygen 5 and Total Usage of Oxygen.	-	LURIA PG.82
1	Dry Residue	16800 mg/l	GOSTI 18164-72
2	Nitrates	-	GOSTI 18826-73
3	Chloride	-	GOSTI 4245-72
4	Hydrogen Sulphide	-	LURIA PG.412
5	Nitrite	-	GOSTI 4192-82
6	Iron	-	GOSTI 6332
7	Arsenic	-	GOSTI 4152-89
8	Copper	-	GOSTI 4388-72
9	Sulphates	-	GOSTI 4389-78

0	Manganese	-	GOSTI 4974-72
1	Polyphosphates	-	GOSTI 18309-72
2	Suspended Particulates	2.3 mg/l	LURIE pg.43
3	Floating particles	-	GONCHATUKI pg-66
4	Ammonia	-	GOSTI 4192-82
5	The acidity/ alkalinity	-	LURIE pg-57.51
6	Permanganate Oxygen	-	ISO 8467-93
7	Petroleum products	0,12 mg/l	LURIE pg.306
8	Background radiation	-	

№	Description of Determining Characteristics	Detected Concentration	Documentation of Technical Normative
1	Mesophiles Aerobic and Facultative Anaerobes Micro Organisms	-	ISO 6222:1999
2	Total Coliforms	-	ISO 9308-1-2007
3	E. Coli	-	ISO 9308-1-2007
4	Salmonella	-	ISO 19250:2010
5	Str. faecalis	-	ISO 7899-2:2000
6	Thermo tolerant coliforms	-	ISO 9308.2:2012
7	Sulphide Reducing Clostridium	-	ISO 6461-2-1986

The Chief of Research Laboratory Canter: ---------- /Ts. Daushvili/

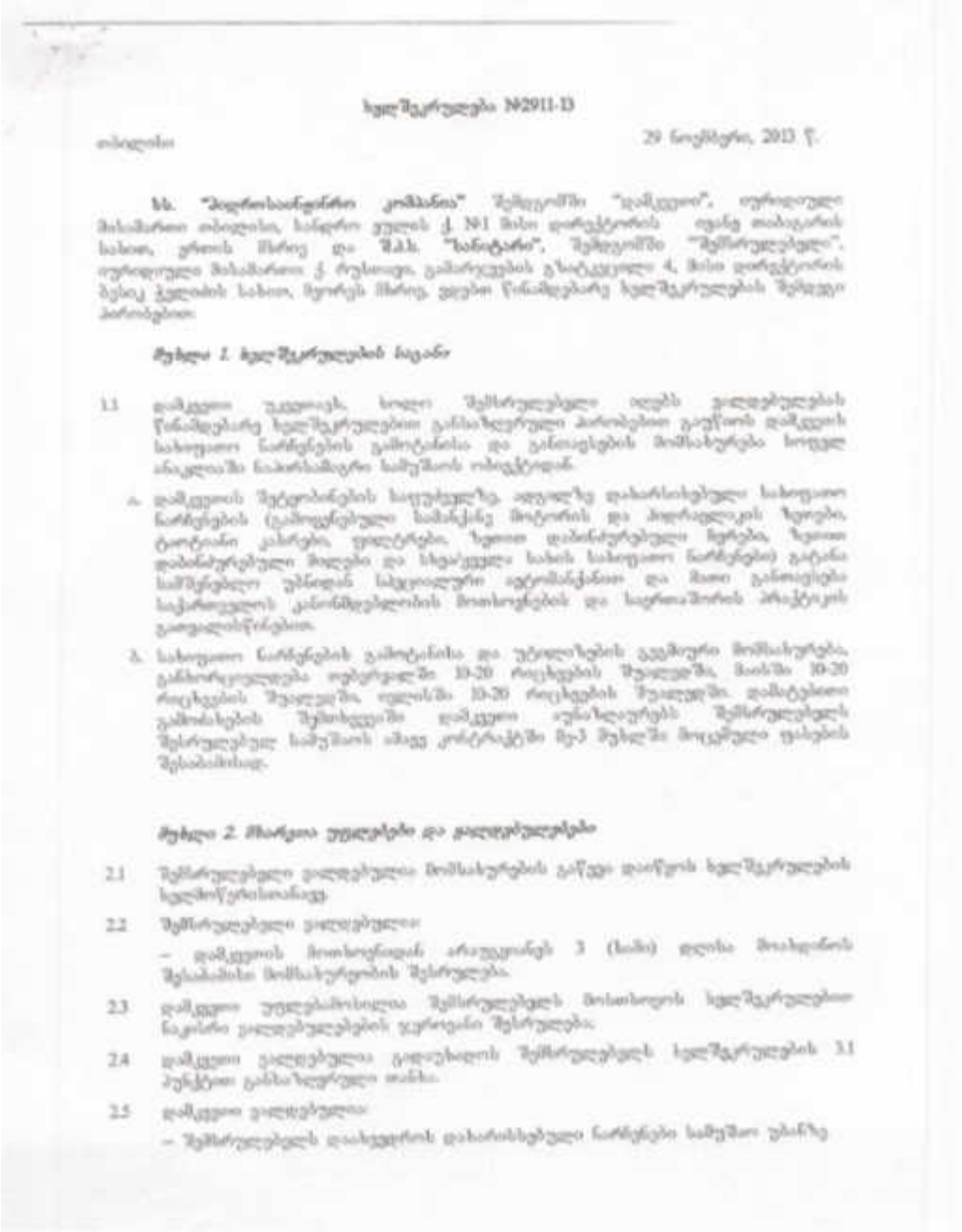
4.4. Photos

Domestic waste

Hazardous waste

Permits:

1. Contract with 'Sanitari' –Hazaedous Waste



ხელშეკრულება №2911-13

თბილისი 29 ნოემბერი, 2013 წ.

ს/ს "ჯორჯიანვეისთი კომპანია" შემდეგში "დამკვეთი", ერთი მხრივ, მისამართი თბილისი, სანდრო ეულის ქ. №1 მისი დირექტორის ერეკ თაბაგარის სახით, ერთის მხრივ და შპს. "სანიტარი", შემდეგში "შემსრულებელი", ერთი მხრივ, მისამართი ქ. რუსთავი, გამარჯვების გზატკეცილი 4, მისი დირექტორის ბესიკ ჯულიას სახით, მეორეს მხრივ, ვდებთ წინამდებარე ხელშეკრულების შემდეგი პირობებით:

მუხლი 1. ხელშეკრულების საგანი

1.1 დამკვეთი უკვეთავს, ხოლო შემსრულებელი იღებს ვალდებულებას წინამდებარე ხელშეკრულებით განსაზღვრული პირობებით გაუწიოს დამკვეთს სახიფათო ნარჩენების გამოტანისა და განთავსების მომსახურება ხოლო ანაკლიაში ნაბარხანაგრი სამუშაოს ორგანიზებას.

ა. დამკვეთის შენობიდან საცურებლზე ადგილზე დახარისხებული სახიფათო ნარჩენების (გამოფენებული სამარქაფ მიტრის და პლრიფლეის ზეთები, ტოტალი კასრები, ფილტრები, ზეთით დაბინძურებული ხელთათმანები, ზეთით დაბინძურებული მიწები და სხვა) გატანა სამშენებლო ეზოდან სპეციალური ავტომანქანით და მათი განთავსება საქართველოს კანონმდებლობის მოთხოვნების და სანიტარიის პრაქტიკის გათვალისწინებით.

ბ. სახიფათო ნარჩენების გამოტანისა და უტილიზების ყველთური მომსახურება, განხორციელდება თვეებიდან 10-20 რიცხვების შუალედში, ხოლო 10-20 რიცხვების შუალედში, ივლისში 10-20 რიცხვების შუალედში. დამატებითი გამოძახების შემთხვევაში დამკვეთი აუნაზღაურებს შემსრულებელს შესრულებულ სამუშაოს ამავე კონტრაქტში მე-3 მუხლში მოცემული ფასების შესაბამისად.

მუხლი 2. მხარეთა უფლებები და ვალდებულებები

2.1 შემსრულებელი ვალდებულია მომსახურების გაწევა დაიწყოს ხელშეკრულების ხელმოწერისთანავე.

2.2 შემსრულებელი ვალდებულია:

– დამკვეთის მოთხოვნიდან არაუგვიანეს 3 (სამი) დღისა მოახდინოს შესაბამისი მომსახურების შესრულება.

2.3 დამკვეთი უფლებამოსილია შემსრულებელს მოთხოვოს ხელშეკრულებით ნაკისრი ვალდებულებების ჯეროვანი შესრულება.

2.4 დამკვეთი ვალდებულია გადაუხადოს შემსრულებელს ხელშეკრულების 3.1 პუნქტით განსაზღვრული თანხა.

2.5 დამკვეთი ვალდებულია:

– შემსრულებელს დასაწყობის დახარისხებული ნარჩენები სამუშაო უბანზე

– სახიფათო ნარჩენები მოათავსოს UN სერთიფიცირებულ მეტალის კასრებში, სათანადო წარწერით და თან ერთოდეს ნარჩენი მასალის უსაფრთხოების მონაცემთა დოკუმენტი (Material Safety Data Sheet, MSDS).

– ნარჩენების გადაზიდვის სატრანსპორტო ზედდებული (Waste Transfer Note).

მუხლი 3. ხელშეკრულების თანხა და ანგარიშსწორების წესი

3.1 დამკვეთი აუნაზღაურებს შემსრულებელს შესრულებულ სამუშაოს მიღება-ჩაბარების აქტის გაფორმებიდან ერთი კვირის განმავლობაში. შემსრულებლის მიერ წარმოდგენილი ინვოისისა და ქვემოთ მოყვანილი განჯასების საფუძველზე:

ა. სახიფათო ნარჩენების გატანა სოფელ ანაკლიაში არსებული სამშენებლო უბნიდან სპეციალური ამწით და მათი განთავსება – ერთ სულაგეზე 937.20 (ცხრაას ოცდაშვიდმეტი ლარი და ოცი თეთრი) დამატებითი ღირებულების გადასახადის ჩათვლით.

ბ. ერთი კგ/ლიტრი სახიფათო ნარჩენის უტილიზების ფასი შეადგენს 5.60 (ხუთ ლარსა და სამოც თეთრს).

3.2 ანაზღაურება განხორციელდება შემდეგი წესით:

გაწეული მომსახურების ღირებულების დამკვეთი გადაუხდის შემსრულებელს მიღება-ჩაბარების აქტის გაფორმებიდან 7 (შვიდი) დღის ვადაში.

მუხლი 4. პასუხისმგებლობა

4.1 ხელშეკრულებით განსაზღვრული ვალდებულებების შეუსრულებლობის ან არაჯეროვნად შესრულების შემთხვევაში, მხარეები პასუხს აგებენ საქართველოს კანონმდებლობით და ამ ხელშეკრულებით გათვალისწინებული პირობებით და წესით. თითოეული მხარე, ვალდებულია მეორე მხარეს აუნაზღაუროს ვალდებულებების შეუსრულებლობით ან არაჯეროვნად შესრულებით გამოწვეული ნებისმიერი პირდაპირი თუ არაპირდაპირი ზიანი.

მუხლი 5. ხელშეკრულების მოქმედების ვადა

5.1 ხელშეკრულება ძალაში შედის მისი ხელმოწერის მომენტიდან და მოქმედებს 2014 წლის 31 დეკემბრამდე.

5.2 ხელშეკრულების შეწყვეტა მხარეებს არ ათავისუფლებს მის შეწყვეტამდე წარმოშობილი ვალდებულებებისგან.

მუხლი 6. მხარეთა განცხადებები და გარანტიები

6.1 მხარეები აცხადებენ და იძლევიან გარანტიას, რომ:

6.1.1 ჩამოყალიბებულნი არიან საქართველოში მოქმედ კანონმდებლობასთან სრულ შესაბამისობაში;

Contract # 2911-13

10.2 ხელშეკრულების რომელიმე მუხლის და/ან პუნქტის საქართველოს კანონმდებლობის საფუძველზე ბათილობის შემთხვევაში დანარჩენი მუხლები და/ან პუნქტები ინარჩუნებენ იურიდიულ ძალას, ხოლო ბათილი მუხლის და/ან პუნქტის ნაცვლად კი მოქმედებს ისეთი მუხლი და/ან პუნქტი, რომლითაც ადეკვატად მიიღწევა ხელშეკრულების მიზანი;

10.3 ხელშეკრულებაში ცვლილებების და დამატებების შეტანა შესაძლებელია მხოლოდ წერილობითი ფორმით, რომელიც ძალაში შევა თითოეული მხარის მიერ მასზე ხელმოწერის მომენტიდან;

10.4 ხელშეკრულების დანართ(ებ)ი წარმოადგენს მის განუყოფელ ნაწილს, დანართ(ებ)ში ცვლილებების და დამატებების შეტანა შესაძლებელია მხოლოდ წერილობითი ფორმით, რომელიც ძალაში შევა თითოეული მხარის მიერ მასზე ხელმოწერის მომენტიდან.

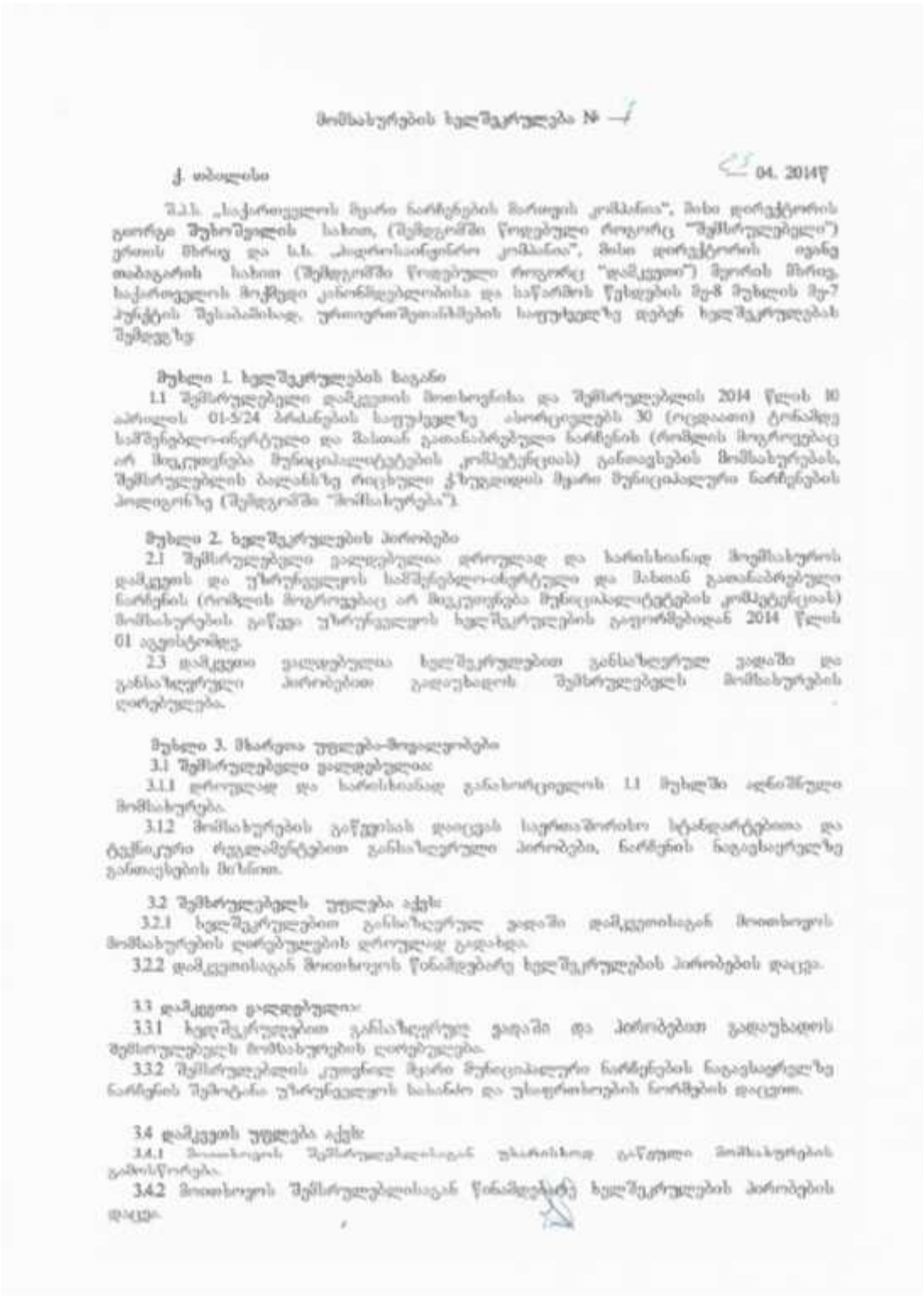
მუხლი 11. მხარეთა რეკვიზიტები:

შემსრულებელი	დამკვეთი
შ.პ.ს. „სანიტარი“	შპს. „ჰიდროსაინჟინრო კომპანია“
ს/კ 204927240	ს/კ 205240960
საქართველო, რუსთავი, გამარჯვების	თბილისი, სანდრო ეულის ქ. №1
გზატკეცილი №4	სს „თიბისი ბანკის ც/ფ“
სებანკო რეკვიზიტები:	
სს “ბანკი რესპუბლიკა”	ბანკის კოდი: TBCBGE22
ბანკის კოდი: REPLGE22	ანგ. № GE30TB7600936050100001
ანგ. № GE76BR0000003602023435	
შ.პ.ს „სანიტარის“ სახელით:	
ბესიკ ჯაფარიძე	ივანე თაბაგარი
დირექტორი	დირექტორი

2. Contract with 'Sandasuptaveba' –Hazardous waste

3. Agreement with Zugdidi Municipality-for Domestic waste

4. Contract with Solid waste company- for construction waste



მომსახურების ხელშეკრულება №

ქ. თბილისი 04. 2014წ

შპს. „საქართველოს მცირე ნარჩენების მართვის კომპანია", მისი დირექტორის გიორგი შენგელიას სახით, (შემდგომში წოდებული როგორც "შემსრულებელი") ერთის მხრივ და შპს. „ალფრისაინვინირინგ კომპანია", მისი დირექტორის ივანე თაბაგარის სახით (შემდგომში წოდებული როგორც "დამკვეთი") მეორის მხრივ, საქართველოს მოქმედი კანონმდებლობისა და სამართლის წესების მე-8 მუხლის მე-7 პუნქტის შესაბამისად, ურთიერთშეთანხმების საფუძველზე დებენ ხელშეკრულებას შემდეგზე:

მუხლი 1. ხელშეკრულების საგანი

1.1 შემსრულებელი დამკვეთის მოთხოვნისა და შემსრულებლის 2014 წლის 10 აპრილის 01-5/24 პრძანების საფუძველზე ასორტიმენტის 30 (ოცდაათი) ტონამდე საშიშნებლოობრტული და მასთან გათანაბრებული ნარჩენის (რომლის მოგროვებაც არ მოქცეულა მუნიციპალიტეტების კომპეტენციას) განთავსების მომსახურებას, შემსრულებლის ბალანსზე რიცხული ჭუნდიდის მცირე მუნიციპალური ნარჩენების პოლიგონზე (შემდგომში "მომსახურება").

მუხლი 2. ხელშეკრულების პირობები

2.1 შემსრულებელი ვალდებულია დროულად და ხარისხიანად მოემსახუროს დამკვეთს და უზრუნველყოს საშიშნებლოობრტული და მასთან გათანაბრებული ნარჩენის (რომლის მოგროვებაც არ მოქცეულა მუნიციპალიტეტების კომპეტენციას) მომსახურების გაწევა უზრუნველყოს ხელშეკრულების გაფორმებიდან 2014 წლის 01 აგვისტომდე.

2.3 დამკვეთი ვალდებულია ხელშეკრულებით განსაზღვრულ ვადაში და განსაზღვრული პირობებით გადაუხადოს შემსრულებელს მომსახურების ღირებულება.

მუხლი 3. მხარეთა უფლება-მოვალეობები

3.1 შემსრულებელი ვალდებულია:

3.1.1 დროულად და ხარისხიანად განახორციელოს 1.1 მუხლში აღნიშნული მომსახურება.

3.1.2 მომსახურების გაწევასა დაცვას საერთაშორისო სტანდარტებთან და ტექნიკური რეგლამენტებით განსაზღვრული პირობები, ნარჩენის განთავსებაზე განთავსების მიზნით.

3.2 შემსრულებელს უფლება აქვს:

3.2.1 ხელშეკრულებით განსაზღვრულ ვადაში დამკვეთისაგან მოითხოვოს მომსახურების ღირებულების დროულად გადახდა.

3.2.2 დამკვეთისაგან მოითხოვოს წინამდებარე ხელშეკრულების პირობების დაცვა.

3.3 დამკვეთი ვალდებულია:

3.3.1 ხელშეკრულებით განსაზღვრულ ვადაში და პირობებით გადაუხადოს შემსრულებელს მომსახურების ღირებულება.

3.3.2 შემსრულებლის კუთვნილ მცირე მუნიციპალური ნარჩენების განთავსებაზე ნარჩენის შეზღუდა უზრუნველყოს სანიმო და უსაფრთხოების ნორმების დაცვით.

3.4 დამკვეთს უფლება აქვს:

3.4.1 მოითხოვოს შემსრულებლისაგან ხარისხიანად გაწეული მომსახურების განხორციელება.

3.4.2 მოითხოვოს შემსრულებლისაგან წინამდებარე ხელშეკრულების პირობების დაცვა.

3.4.3 შემსრულებლის მიერ წინამდებარე ხელშეკრულების შეუსრულებლობის ან არასათანადოდ შესრულების შემთხვევაში წერილობითი ფორმით, აცნობოს შემსრულებელს.

3.4.4 მხარეები ვალდებულნი არიან დროულად და ჯეროვნად შეასრულონ წინამდებარე ხელშეკრულებით ნაკისრი ვალდებულებები.

მუხლი 4. ანგარიშსწორება და ხელშეკრულების ღირებულება

4.1 გასაწევი მომსახურების ღირებულება განისაზღვრება ეროვნულ ვალუტაში.

4.2 1 (ერთი) ტონა სამშენებლო-ინერტული და მასთან გათანაბრებული ნარჩენის (რომლის მოცულობაც არ მოიცავს მუნიციპალიტეტების კომპეტენციას) შემსრულებლის კუთვნილ მყარი საყოფაცხოვრებო ნარჩენების პოლიგონზე განთავსების მომსახურების ღირებულება შეადგენს 12 (თორმეტი) ლარს დღგ-ს გარეშე. დამკვეთი, შემსრულებლის მიერ გასაწევი მომსახურების შესაბამის ანაზღაურებას უზრუნველყოფს მყარი მუნიციპალური ნარჩენების ნაგავსაყრელზე, ფაქტიურად შეტანილი ნარჩენის საერთო მოცულობის შესაბამისად.

4.3 დამკვეთი ვალდებულია ჩარიცხოს თანხა შემსრულებლის საბანკო ანგარიშზე კონკრეტულად გაწეული მომსახურების გაწევის მიღება-ჩაბარების აქტის გაფორმებიდან 10 (ათი) კალენდარულ დღეში.

4.4 შემსრულებლის მიერ წინამდებარე ხელშეკრულებით ნაკისრი ვალდებულებების შესრულების შემდეგ მხარეები ადგენენ მომსახურების გაწევის მიღება-ჩაბარების აქტს, რაც ადასტურებს შემსრულებლის მიერ ნაკისრი ვალდებულებების ჯეროვნად შესრულებას.

4.5 შემსრულებლის მხრიდან მომსახურების გაწევის მიღება-ჩაბარების აქტს ხელს აწერს შემსრულებლის სტრუქტურული ერთეულის - რეგიონული მართვის დეპარტამენტის უფროსი კოორდინატორი (რეგიონული მართვის საკითხებში სამეგრელო ზემო-სვანეთის რეგიონში) – აბესალომ ჯღარკავა.

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.

5.2 ხელშეკრულების ვადამდე შეწყვეტა მხარეებს არ ათავისუფლებს ხელშეკრულების შეწყვეტამდე შეუსრულებელი ვალდებულებების შესრულების მოვალეობისაგან.

მუხლი 6. სადავო საკითხების მოგვარება

დამკვეთსა და შემსრულებელს შორის წინამდებარე ხელშეკრულების რეგულირებისას წარმოშობილი სადავო საკითხები წყდება მხარეთა შეთანხმებით, ხოლო შეთანხმების მიუღწევლობის შემთხვევაში სადავო საკითხს განიხილავს სასამართლო.

მუხლი 7. დასკვნითი დებულებები

7.1 წინამდებარე ხელშეკრულების ყველა მუხლი და დანართი წარმოადგენს მის განუყოფელ ნაწილს.

7.2 წინამდებარე ხელშეკრულებაში ცვლილების შეტანა შეიძლება მოხდეს მხოლოდ მხარეთა შეთანხმებით, რომელიც უნდა იყოს წერილობითი. ზეპირ გარიგებებს ძალა არა აქვთ.

შემსრულებელი ____________ დამკვეთი ____________

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

მუხლი 8. მხარეთა რეკვიზიტები და ხელმოწერები

შემსრულებელი

შპს „ჩაჭრილველის მყარი ნარჩენების მართვის კომპანია", იურიდიული მის: ქ.თბილისი, აღმაშენებლის №12, ფაქტიური მის: ქ. თბილისი, ანა პოლიტკოვსკაიას ქ. №10 მე-4 სართული, საიდენტიფიკაციო კოდი: 404942470, საბანკო რეკვიზიტები: ბანკი: სს „თიბისი ბანკი", ბანკის კოდი: TBCBGE22, ანგარიშის ნომერი: GE51TB7161936080100005.

ხელმოწერა _____ გიორგი შუხოშვილი

დამკვეთი

ს.ს. „ბიოსანიტარული კომპანია", იურიდიული მის. ქ. თბილისი, სანდრო ეულის ქ№1, ფაქტიური მის: ქ.თბილისი, ი. ჭავჭავაძის გამზირი №39, საიდენტიფიკაციო კოდი: 205240960, საბანკო რეკვიზიტები: სს „თი ბი სი" ბანკი, ბანკის კოდი TBCBGE22, ანგარიშის ნომერი GE80TB 76 009 360 501 000 01.

ხელმოწერა _____ ივანე თამაგარი