

Environmental Assessment and Review Framework

GEORGIA: Livable Cities Investment Program (LCIP)

Asian Development Bank

LEPL Municipal Development Fund of Georgia

May 2020

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ABBREVIATIONS

ADB	Asian Development Bank
CC	Construction Company
DEPP	Department of Environmental Protection and Permits
EA	Executing Agency
EC	Environmental Consultant
EARF	Environmental Assessment and Review Framework
EEC	Environmental Expertise Conclusion
EIA	Environmental Impact Assessment
EIP	Environmental Impact Permit
EMP	Environmental Management Plan
EMC	Environmental Management Consultant
EMS	Environmental Management Specialist
EPRU	Environmental Protection and Resettlement Unit
GoG	Government of Georgia
GRC	Grievance Redress Committee
IA	Implementing Agency
IPMO	Investment Program Management Office
IEE	Initial Environmental Examination
LCIP	Livable Cities Investment Program
MoEPA	Ministry of Environment Protection and Agriculture
MoRDI	Ministry of Regional Development & Infrastructure of Georgia
MoESD	Ministry of Economy and Sustainable Development of Georgia
MSDP	Municipal Services Development Project
MDF	Municipal Development Fund
NRW	Non-revenue water
O&M	Operation and Maintenance
OHSU	Occupational Health and Safety Unit
PPTA	Project Preparation Technical Assistance
REA	Rapid Environmental Assessment
SPS	Safeguard Policy Statement

SSEMP	Site Specific EMP
SC	Supervision Company
ToT	Training for trainers

TABLE OF CONTENTS

I. INTRODUCTION	27
CURRENT SITUATION ANALYSES IN PROJECT IMPLEMENTATION AREA	28
II. ASSESSMENT OF LEGAL FRAMEWORK	29
A. National Legislation	29
A.1 Environmental Regulations and Standards	36
B. ADB Policies	43
Accountability Mechanism	44
C. Comparison of the National legislation and ADB Requirements	45
III. ASSESSMENT OF INSTITUTIONAL CAPACITY FOR IMPLEMENTATION OF ENVIRONMENTAL SAFEGUARDS	49
V. ENVIRONMENTAL ASSESSMENT FOR SUBPROJECTS OF THE PROGRAM	58
A. Environmental Assessment Procedure	58
Preparation of Initial Environmental Examinations (IEE)	59
Preparation of Environmental Management Plan (EMP)	61
VI. CONSULTATION, DISCLOSURE AND GRIEVANCE REDRESS	62
A. Consultation & Disclosure	62
B. Grievance Redress Mechanism	63

LIST OF ANNEXES

Annex 1.Organization Chart of the MDF	68
Annex 2 Outline of an EIA and/or IEE Report	Error! Bookmark not defined.
Annex 3. Rapid Environmental Assessment form.....	50
Annex4. Template of semi-annual Environmental Monitoring Report	53

LIST OF FIGURES

Figure 1 Grievance Redress Mechanism	Error! Bookmark not defined.
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I. INTRODUCTION

1. This document is the Environmental Assessment and Review Framework (EARF) for the Asian Development Bank funded Livable Cities Investment Program (LCIP). This is prepared to adequately address the ADB Safeguard Policy Statement (SPS 2009) requirements and is to be endorsed by the Georgian government. The objective of preparing this EARF is to provide a formal structure through which the environmental impacts of new and amended subprojects can be assessed and mitigated by the Executing Agency in the future, in compliance with the ADB policy (SPS 2009) and national legislation.
2. The Asian Development Bank (ADB) and the Government of Georgia (GoG) reoriented urban sector operations to provide integrated and programmatic solutions for developing Livable cities in Georgia that are economically competitive, socially inclusive, and environmentally resilient¹. Since November 2016, ADB has supported the government to mainstream an integrated and participatory approach to urban development by improving strategic planning of selected urban area clusters to achieve a more balanced regional development by preparing Integrated Urban Action Plans (IUAPs). Building on this, the government has prioritized crucial urban investments for ADB to take forward through feasibility studies and safeguards due diligence. These include integrated solutions that bring co-benefits to the citizens in the development of the urban clusters including water supply, sewerage and sanitation (including off-network solutions), urban transport and mobility (including nonmotorized and public transport), solid waste management, economic corridors, cultural and historical heritage conservation, flood control and drainage, kindergartens, sport complexes, urban safety and resilience, among others. Additionally, Government of Georgia announced educational sector development as of vital importance. Moreover, the strategic document prepared by Ministry of Education, Science, Culture and Sport of Georgia -Preschool Strategy 2019 – 2021 aims to increase access to high quality preschool education, which could not be achieved without relevant pre-school infrastructure and environment. Based on above mentioned Government of Georgia vigorously began investing in educational infrastructure, mostly in kindergarten and school buildings. Ultimate goal of the project is to improve and create quality pre-school/kindergarten infrastructure.
3. To expedite balanced regional development, support for basic urban services and transport have been prioritized, particularly in small towns and regional cities that are potential hubs for tourism, agribusiness, and regional trade as key drivers of economic growth. Governance and capacity building will need to be integrated into the ensuing projects to achieve more robust results and ensure operational and financial sustainability of infrastructure projects.
4. The government has proposed to process the Livable Cities Investment Program (LCIP) to improve urban and tourism infrastructure and services across Georgia. LCIP will help improve the livability of the urban area clusters interlinked outputs: (i) improved adequacy and efficiency of urban infrastructure and services, (ii) improved accessibility, connectivity and attractiveness of regional tourism clusters, and (iii) enhanced institutional capacity for implementing and managing urban infrastructure and services, (iv) improved access to quality pre-school infrastructure, improved environment: new playgrounds increasing gross motor skills of children, safe building - considering fire alarm and safety systems, clean and updated sanitary infrastructure including water closet and kitchen; (v) improved planning of the kindergarten building; increased space per child and per teacher; energy efficient kindergarten buildings; (vi) improvement of educational and working conditions for children and teachers in kindergarten; (vii) Improved access to inclusive child-friendly quality education; (viii) social impact – increased income of population during the implementation (employment of workers), and after the construction; (ix) implemented a healthy lifestyle for the population, which will also reduce youth drug addiction and alcoholism. (x) new sports complexes will lead to the success of the athletes, which will be especially important for the

¹ ADB's Urban Operational Plan 2012-2020 fosters the growth of Competitive, Inclusive, and Green Cities to improve the performance of cities on the Economic, Equity, and Environment (3Es) fronts. It focuses on 3 innovative approaches to guide the development of livable cities, which is a long-term process, achieved best through integrated planning and implementation of investment.

young people living in regions, as the representatives of the communities often have significant success in the international arena in a various types of sport, including water polo, synchronized swimming, etc.

5. The program is assessed *low risk*, because the government and executing agency have substantial experience with ADB-financed programs.

CURRENT SITUATION ANALYSES IN PROGRAM IMPLEMENTATION AREA

6. Tbilisi, the capital city of Georgia, contributes 70% of the national GDP, with just half of its urban population. The city's urban population also increased from 47% to 51% of the country's total between 2007 and 2017, while secondary cities in the regions experienced declines in urban population during the same period. The reverse trend highlights issues such as out-migration, unbalanced economic growth, limited employment opportunities and poor livability of these urban regions. ADB undertook a National Urban Assessment (NUA) in 2015 that identified the need for balanced regional development to unlock the potential for inclusive economic growth through urban development by adopting multiple strategies, new initiatives, and innovative funding mechanisms at the national and regional level through integrated urban investment planning. Thus, deteriorating livability in cities and peri-urban areas, represents the main problem, caused by deficient regional connectivity and public transport, limited tourism development, Inadequate Infrastructure and inefficient services, limited accessibility, safety and sensitive design of public spaces and buildings for differently abled, senior citizens, women and children, inadequate disaster risk reduction measures, deteriorated heritage structures and ecological sites, insufficient vocational and recreational facilities, unattractive and limited public open spaces, low energy efficiency in buildings and utility facilities, limited municipal revenue and resources. Eventually, stagnant and unbalanced regional growth, high level of out-migration from regions and in-migration to Tbilisi environmental degradation and climate risk and untapped tourism potential have been affected.
7. Education facilities in poor condition usually are less competitive in attracting education professionals. Most of the rural kindergarten buildings are operation expired, in poor structural condition without access for children with special needs and with old planning standards that are far away from modern design. The poor condition of the buildings creates high risk in terms of health and safety, especially for the children. The early years of children's life are very important for their health and development. Therefore, the modern infrastructure and comfortable environment will positively effect on children's growth, education process and increase motivation. Based on the above mentioned, Government of Georgia actively started to invest in pre-school and school infrastructure, mostly through Municipal Development Fund of Georgia. From 2018, Government of Georgia announced educational sector as of national importance and decided to conduct a number of reforms by investing 6% of the GDP – quarter of the budget. Besides the reforms, respective infrastructure and environment is of vital importance. Ministry of Education, Science, Culture and Sport of Georgia prepared the strategic document Preschool Strategy 2019 – 2021. Aim of the document is to enhance access to high quality preschool education and prepare children for the school. According to the document, government should increase access to high quality preschool education up to 95% by 2023. Additionally, based on the research conducted by UNICEF in the regions of Georgia, there are quite low preschool enrolment rates, especially concerning children with special needs. However, by joining to UN Sustainable Development Goals, Government of Georgia took responsibility to ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education.

II. ASSESSMENT OF LEGAL FRAMEWORK

A. National Legislation

8. Environmental legislation of Georgia comprises the Constitution, environmental laws, international agreements, by-laws, presidential decrees, ministerial orders, instructions, and regulations. Along with the national regulations, Georgia is signatory to a number of international conventions, including those related to environmental protection.
9. The Program will be implemented in compliance with the national regulations and in line with the ABD SPS 2009 requirements. Therefore, more stringent requirements of the two are applicable. Georgia has a large set of specific standards that refer to emission, effluent, and noise standards, as well as standard to handle and dispose specific wastes ranging from sewage to hazardous wastes.
10. A table 1 below presents a list of Georgia's environmental legislation as it pertains to the proposed program.

Table 1. List of laws relevant to environmental protection

Framework Legislation	
1995	Constitution of Georgia (as amended 04.10.2013) Reg. No - 010.010.000.01.001.000.116
1996	Environmental Protection (as amended 26.12.2014) Reg. No - 360.000.000.05.001.000.184
Permitting Legislation	
2005	Licensing and Permitting (as amended 18.09.2014)
Specific Environmental Laws	
1994	Soil Protection (as amended 26.12.2014) Reg. No - 370.010.000.05.001.000.080
1996	System of Protected Areas (as amended 30.04.2014) Reg. No - 360.050.000.05.001.000.127
2007	on Status of the Protected Areas (as amended 30.04.2014) Reg. No - 360.050.000.05.001.003.060
2014	Waste Management Code 26.12.2014 Reg. No -360160000.05.001.017608
2017	Environmental Impact Assessment Code 01/06/2017
1996	Minerals (as amended 26.12.2014) Reg. No - 380.000.000.05.001.000.140
1997	Wildlife (as amended 26.12.2014) Reg. No - 410.000.000.05.001.000.186
1997	Water Protection (as amended 26.12.2014) Reg. No - 400.000.000.05.001.000.253
1997	Transit and Import of Hazardous Waste within and into the Territory of Georgia as amended 11.03.2011) Reg. No - 300230000.05.001.016218
1998	Pesticides and Agrochemicals as amended 08.05.2012) Reg. No - 340120000.05.001.016723

Framework Legislation	
1999	Atmospheric Air Protection as amended 5.02.2014) Reg. No - 420.000.000.05.001.000.595
1999	Forest Code as (amended 6.09.2013) Reg. No - 390.000.000.05.001.000.599
2003	Red List and Red Data Book of Georgia (as amended 6.09.2013) Reg. No - 360.060.000.05.001.001.297
Relevant Laws	
2007	On Cultural Heritage (as amended 26.12.2014) Reg. No - 450.030.000.05.001.002.815
2007	On Public Health (as amended 29.05.2014) Reg. No - 470.000.000.05.001.002.920
2005	On Fire Protection and Safety 24.06.2005 Reg. No - 140.060.000.05.001.000.355
2006	on Regulation and Engineering Protection of Coasts of Sea, Water Reservoirs and Rivers of Georgia – 27.12.2006 Reg. No - 330.130.000.11.116.005.130
2014	Technical Regulations: “on Drinking Water standard”. Approved by the Government decree № 58 Reg. No- 300160070.10.003.017676
2014	Environmental Technical Regulations. Approved by the Government decree № 17 Reg No- 300160070.10.003.017608

11. Summaries of the listed documents are given below:

12. The basic legal document is **“The Constitution of Georgia”**, which was adopted in 1995. While the Constitution of Georgia does not directly address environmental matters, it does lay down the legal framework that guarantees environmental protection and public access to information with regard to environmental conditions.

13. Article 37, Part 3 states that “any person has the right to live in a healthy environment, use the natural and cultural environment. Any person is obliged to take care of the natural and cultural environment.” Article 37, Part 5 states that: “an individual has the right to obtain full, unbiased and timely information regarding his working and living environment.”

14. Article 41, Part 1 states that “a citizen of Georgia is entitled to access information on such citizen as well as official documents available in State Institutions provided it does not contain confidential information of state, professional or commercial importance, in accordance with the applicable legal rules.

15. **Environmental Assessment Code (EAC)** was adopted in June 2017 and entered into force on January 2018. The new Code replaced the law on Environmental Impact Permit and Ecological Expertise. The Environmental Assessment Code sets up regulations and procedures for Environmental Impact Assessment, Strategic Environmental Assessment, Trans-boundary Environmental Assessment, Public Participation and Expertise in the Decision-Making Process. The EIA shall be subject to the activities envisaged by the Annex I of this Code and the activities envisaged by the Annex II of the same Code, which will be subject to EIA on the basis of screening procedure set out in Article 7 of this Code (Article 5 of Chapter 2).

16. **The Law of Georgia on Environment Protection (1996)** regulates the legal relations between the state establishments and physical or legal entities in the field related to the use of territorial waters, air space, including continental shelf and special economic zones, environmental protection and natural resources on the territory of Georgia. The Law regulates the standards of the environmental protection and issues of environmental management; it describes the economic sanctions, standards and issues of environmental impact, different issues of protection of the natural eco-systems and biodiversity, and global and regional management issues. In addition to the above-mentioned, the Law considers the major principles of waste management. The law

defines the ecological requirements for the waste (Article 34). According to the provision of the given Article, an entrepreneur is obliged to reduce the origination of industrial, domestic and other types of waste, ensure their treatment, utilization, placement or burying by considering the environmental, sanitary-hygienic and epidemiological standards and rules. The Law defines the requirements for the placement of toxic, radioactive and other hazardous waste and prohibits their discharge in the surface water sources.

17. **The Law of Georgia on Licenses and Permits (2005)** defines the list of activities needing licenses or permits, including so called “Environmental Decision”. It also defines the requirements for the license or permit issue. The Law, together with the normative by-laws, regulates such organized activity or action, which relates to an indefinite circle of entities, is characterized by increased hazard to the human life or health, affects particularly important state or public interests or is related to the use of a state resource. The given Law regulates the field regulated by a license or permit; it gives a thorough list of licenses and permits, and establishes the rules to issue the licenses and permits, 28 makes amendments to them or abolish them. Under the Law, a state regulation of the activity or action through a license or permit is undertaken only when the given activity or action is directly associated with the increased hazard to the human life or health or fields of state or public interests. The state regulation is undertaken only when the issuance of a license or permit is a real means to reduce the hazard in question or consider state or public interests. The aim and major principles of regulating the activity or action via licenses or permits are as follows:
 - Provision and protection of human life and health
 - Safety and protection of a human’s residential and cultural environment
 - Protection of state and public interests
18. The state ensures protection of the environment and, correspondingly, protection of water as its main component in **The Law of Georgia on Water (1997)**. All residents of Georgia are liable to ensure the rational and sustainable use and protection of water. They have to prevent its contamination, pollution and depletion. The dumping of industrial, household and other garbage and wastes in water bodies is prohibited according to this act. The disposal of industrial, household and other effluents into water bodies is permitted on the basis of a license by the Ministry. With the objective of protecting the Black Sea and preserving its ecological system, all natural and legal persons (including foreigners) are obliged to take measures for preventing pollution of the sea with wastewater from the sources of pollution located on the land. The use of a surface water body for discharging industrial, communal-household, drainage and other wastewater is allowed only under a water use license issued on the basis of the Ministry-approved multipurpose water utilization plans and water management balance-sheet.
19. Under the law, purification of the wastewater discharged in a water body is required up to the fixed standard. In order to protect the quality of water resources, the law requests creation of sanitary protection zone that consists of three belts, each having a special regime. The procedure fixing the water quality standards, the maximum permissible rates of emission of harmful substances (including microorganisms) into ambience, the water abstraction quotas, and the temporary rates (limits) of emission of harmful substances (including microorganisms) into water is defined by the Law of Georgia on the Environmental Protection.
20. Georgian legislation may provide liability for other violations of law in the water protection and use sphere. Water users shall compensate for damages caused by violation of the law on Water in the amount and under procedure established by legislation of Georgia. Under Article 17 (Protection of natural resources of the Black Sea), anadromous fish species (fish species seasonally migrating upstream of a river against the current) within the rivers of Georgia shall be protected by creation of conditions necessary for their reproduction, through conservation of the habitat, determination of procedures for regulating the fishing industry, determination of a total permissible amount of catching these species within the territorial waters, and within and outside special economic zones of Georgia, also through implementation of other measures defined by the legislation of Georgia. Article 20 (River water protection zone) defines protection zone of a river shall be its adjacent territory, where a special regime is established to protect water resources from pollution, littering, fouling, and depletion. This zone may include its dry bed, adjacent terraces, natural elevated and

steep riversides, as well as gullies directly adjacent to riversides. The width of a river water protection zone shall be measured in meters from the edge of a riverbed to both sides under the following procedure:

- 10 meters - in the case of a river up to 25 kilometers long,
- 20 meters - in the case of a river up to 50 kilometers long,
- 30 meters - in the case of a river up to 75 kilometers long,
- 50 meters - in the case of a river over 75 kilometers long.

21. Within this zone, it is prohibited to: (i) construct, expand or reconstruct functioning enterprises, except for cases directly determined by law; (ii) spray, by air atomization, perennial plants, sown crops, and forest lands with toxic chemicals; and (iv) keep, collect or place toxic chemicals and mineral fertilizers, as well as any other wastes as defined in the legislation of Georgia. It is requested that hydraulic structures located within a water protection zone shall be normally equipped with appropriate technical facilities to completely exclude the possibility of river pollution and littering.

22. The aim of new **law on Waste Management – Waste Management Code** (January 2015) – is to provide for the legal conditions for implementation of measures aiming at prevention of generation of waste and increased re-use, environmentally-sound treatment of waste (including recycling and extraction of secondary raw materials, energy recovery from waste, as well as safe disposal). The objective of this Law is to protect the environment and human health: by preventing and reducing the adverse impacts of the generation of waste; by introducing effective mechanisms of management of waste; by reducing damage caused by resource use and improving the efficiency of such use. In accordance with the new Waste Management Code in Georgia, legal and natural persons that produce more than 200 tons of non-hazardous waste or 1,000 tons of inert waste or any amount of hazardous waste annually, shall prepare a company waste management plan that must be submitted to Ministry of Environmental Protection and Agriculture of Georgia for approval. It is also necessary to identify an environmental manager and provide information to MEPA. The rule for collecting and processing municipal waste is determined by the Code, as well as the prohibitions related to the management of hazardous waste. The Code obliges to develop a system of segmentation and collection of hazardous waste in the case of the production of more than 2 tons of hazardous waste during the year.

23. The following summarizes the key points of the code.

Article 7 - General waste management requirements

- Waste, depending on its type, properties and composition, shall be collected, transported and treated in a manner not impeding its further recovery.
- Waste shall be collected, transported and treated in a manner which excludes, to the maximum extent possible, pollution of the environment and risks for human health.
- In case of waste pollution caused by waste transport activities, the waste transporter shall be responsible for taking clean up measures.
- The producer and holder of waste is obliged to treat their waste
- on their own or hand it over for collection, transport and treatment to persons entitled to carry out such operations in accordance with this Law and legislation of Georgia.
- Where waste has been submitted for recovery or disposal, the original producer's and/or holder's responsibility shall remain until recovery or disposal is completed.
- Persons who collect and transport waste shall hand it over for treatment to appropriate facilities, holding the relevant permit or registration.
- The burning of waste outside permitted incinerators shall be prohibited.

Article 14 - Company waste management plan

- Legal and natural persons that produce more than 200 tons of non-hazardous waste or 1000 tons of inert waste or any amount of hazardous waste annually, shall prepare a company waste management plan.

Article 15 – Environmental Manager

- The persons under Article 14 of this Law shall nominate a suitable person as a company environmental manager.

Article 17 - General obligations for hazardous waste management

- The production, collection and transportation of hazardous waste, as well as its storage and treatment, shall be carried out in conditions providing protection for the environment and human health. It shall be prohibited to
 - a) discard hazardous waste outside waste collection containers;
 - b) discharge it into the sewerage systems or underground or surface waters, including the sea;
 - c) burn it outside waste incinerators permitted for that purpose;
 - d) treat it outside waste treatment facilities permitted to treat such type of waste

Article 18 - Special obligations for hazardous waste management

- Waste producers that produce more than 2 tons of hazardous waste per year shall
 - a) create and implement a suitable separation and collection system for such waste;
 - b) designate an environmental manager, pursuant to Article 15 of this Law, responsible to make arrangements for the safe management of said waste;
 - c) make arrangements for briefing and training for staff handling hazardous waste.
- Until the exact content of waste is unknown, the waste shall be regarded as hazardous.
- Hazardous waste for which no appropriate treatment techniques and/or technologies are available in accordance with the requirements of this Law within the territory of Georgia shall be exported for treatment. Until the export is carried out, the waste shall be safely stored at temporary storage facilities.
- The Ministry may exceptionally once allow for an extended storage period of up to one year if this is justified and does not harm human health or the environment.
- Hazardous waste may only be collected and transported by a natural or legal person after its registration pursuant to this Law.

Article 29 - Obligations for keeping records and reporting on waste

- Records on waste shall be kept and waste reports shall be submitted to the Ministry by natural and legal persons:
 - a) dealing professionally with collection, transport and/or treatment of waste;
 - b) which produced more than more than 2 tones non-hazardous (excluding municipal waste) waste or any amount of hazardous waste per year.

24. The Law of Georgia on Cultural Heritage (2007). Article 14 of the Law specifies the requirements for 'large-scale' construction works. According to this Article, a decision on career treatment and or extraction on the whole territory of Georgia, as well as on construction of an object of a special importance as it may be defined under the legislation of Georgia, is made by a body designated by the legislation of Georgia based on the positive decision of the Ministry of Culture and Monument Protection of Georgia. The basis for the conclusion is the archaeological research of the proper territory to be carried out by the entity wishing to accomplish the ground works. The entity wishing to do the ground works is obliged to submit to the Ministry the documentation about the archaeological research of the territory in question. The preliminary research should include field-research and laboratory works. In case of identifying an archaeological object on the territory to study, the conclusion of the archaeological research should contain the following information: (a) a thorough field study of the archaeological layers and objects identified on the study territory by using modern methodologies, (b) recommendations about the problem of conservation of the identified objects and planning of the building activity on the design territory, on the basis of the archaeological research.

25. **The Law of Georgia “On the Red List and Red Book” (2003)** regulates the legal relations in the field of developing the Red List and Red Book, protecting and using the endangered species, except the legal issues of the international trade with endangered wild animals and wild plants, which within the limits of the jurisdiction of Georgia are regulated by virtue of the Convention ‘On the international trade with the endangered species of wild fauna and flora’ concluded on March 3 of 1973 in the city of Washington. According to Article 10 of the Law, any activity, including hunting, fishing, extraction, cutting down and hay-mowing, except particular cases envisaged by the present Law, Law of Georgia ‘On animal life’ and legislation of Georgia, which may result in the reduction in number of the end. Endangered species, deterioration of the breeding area or living conditions, is prohibited. The Red List of Georgia was approved by the Presidential Decree No. 303 ‘On approving the Red List of Georgia’ (May 2, 2006). The law defines special cases when removal of individuals of the Georgian Red List species from their habitats is allowed. Decisions are made by the Government of Georgia.
26. **The Forest Code (1999)** regulates the legal relations to the maintenance, protection, restoration and use of forest resources of Georgia. The Forest Code of Georgia aims to: maintenance, protection and restoration of forests for the maintenance and improvement of climate, water regulation, protective, cultural, recreational and other useful natural properties; It allows only those activities, which are related to forest resource protection or use such as timber logging, collection of non-timber resources, use of area for agriculture or recreation, establishment of hunting farms, etc. State forestry fund may be used for a special purpose in urgent cases. Decisions are made by the Government of Georgia.
27. **Law on atmospheric air protection (1999)** regulates the protection of atmospheric air from the harmful anthropogenic influence on the entire territory of Georgia. The objective of the law is to ensure the safe environment for the atmospheric air of human health and the natural environment. Four types of pollution are considered (Part II, Chapter IV, Article II.2): (i) Pollution of environment with hazardous matter; (ii) Radiation pollution of atmospheric air; (iii) Pollution with microorganisms and biologically active matter of microbial origin; and (iv) Noise, vibration, electromagnetic fields, and other physical impact. Maximum permitted limits for concentration of hazardous substances into the atmospheric air are defined for each contaminant and represent maximum concentration of hazardous pollutants, in averaged time span, recurring action of which has not have negative impact on human health and environment. Maximum permitted levels of emission of hazardous matters into the atmospheric air are defined with allowance of prospective of development of the enterprise, physical. geographical and climatic conditions, dispersion of emitted substances, background concentration of pollutants emitted from other neighboring enterprises, taking into account inter-location of existing or planned dwellings, sanatoria and recreation zones. In compliance with the law (Clause 28), in order to restrict pollution from the stationary sources²¹ of hazardous emissions the limits of emissions are to be set. The limit of pollution from the stationary source of emission is permitted quantity (mass) of emitted hazardous matters (Clause 29). Maximum annual emission level means the maximum permitted limit of discharge. This is annual permitted quantity of emission predetermined by technology in conditions of standard permitted capacity of discharge. Annual maximum capacity is defined for each hazardous substance and is calculated so that for each stationary source of emission cumulative emission from all registered sources of discharge does not exceed relevant maximum permitted value. Discharge of hazardous emissions from the stationary sources of emission without approved limits of discharge is forbidden. The standards of emissions (Clause 30) are to be worked out by the enterprise itself. According to the law (Clause 38) the enterprise is responsible for conducting self-monitoring which includes measurement of emission (evaluation), recording/registration and accounting. Emission which has not been recorded in self-monitoring record is considered illegal. As mentioned in the Clause 51 results of the monitoring and information on pollution of the air with hazardous substances is transparent and accessible for the public.
28. The aim of the **Law of Georgia on Public Health (2007)** is as follows: Promotion of the introduction of a good health and healthy lifestyle of the population; Creation of the environment, which is safe for a human health; Promotion of the protection of the reproductive health of a family; Prevention of infectious and non-infectious diseases. The Law defines the rights and obligations of the population and legal entities in the field of public health. Aiming at establishing the

environment safe to the public health, the Ministry sets the qualitative standards for the environment safe for a human health (atmospheric air, water, soil, noise, vibration, electromagnetic radiation), including maximum permissible concentrations and rates of harmful impact. The standards are mandatory. Every person on the territory of Georgia is obliged not to carry out the activity, which causes a hazard of the infectious and non-infectious diseases to spread and helps the origination of the risks to human health; protect the sanitary and epidemiological standards; to supply the information to the public health department about all emergencies caused by the violation of the sanitary norms in the production or technological process, etc. The observance of the standards is controlled by appropriate state structures. The responsibility for the internal and external audits rests with a certified, independent laboratory.

29. **Law on Soil Protection:** The law provides the policy requirements and principles of the protection and preservation of fertility soil resources against negative impacts. Soil protection is the state problem since correct and rational use of all types of soil, including barren soil, saline soils, swamped soil, alkali soil, and aqueous soil are the main reserve of dynamic development of agriculture and of the national economy as a whole. The purpose of the present Law is to establish the rights and the duties of landholders, landowners, and the state in the field of soil protect. The law defines soil protection measures and methods and prohibits certain activities, e.g. use of fertile soil for non-agricultural purposes; implementation of non-agricultural activity without topsoil removal and conservation; any activity, which results in deterioration of soil properties, etc. In addition to this law soil protection issues are regulated by order #2-277 (25.11.2005) of the Minister of Agriculture on approving Recommendations for Complex Measures for Soil Protection from the Erosion.
30. Laws and regulations related to social aspects and land ownership applicable to the program are presented below.
31. **Law on Agricultural Land Ownership.** Objective of the law is to ensure improvement of the structure of agricultural land based on rational use of resources, avoidance of splitting and unsustainable use of the land plots. The law defined the rules for acquisition and selling the land, participation of the state in agricultural land related relations. The law deals with land ownership issues, restrictions of land alienation in case of co-ownership, sets priority of the state in buying out the agricultural land plots.
32. **Civil Code** regulates contractual relations, describes the rights and responsibilities of natural and legal persons, defines the penalties in the case of violations of the requirements set out in the document. The Civil Code differentiates between movable and immovable property and provides rules for acquiring title over property, as well as any proprietary or obligatory rights thereto. This piece of legislation must be taken into account when entering into contracts in Georgia.
33. **Law on Rules for Expropriation of Property for Public Needs** outlines respective procedures and conditions for expropriation of private property as well as procedures for compensation payment for expropriated property or the transfer of other property with the same market value.
34. **Law on Cultural Heritage** sets out procedures for protection of cultural heritage and permitting arrangements for archaeological investigations.
35. **Law on Public Health** regulates legal relations for ensuring a safe environment for human health. It indicates quality norms of for air, soil and water pollution and restrictions related to ionized radiation, noise, and vibration. The limits must be complied with. Section 7 of the law is dedicated to safety of technological processes.
36. **Law on State Property** regulates relationships on state property management and transfer for use by others, defines special requirements and procedures for transfers. The Ministry of Economy and Sustainable Development is the state authority in charge of the property.
37. **Labor Code** regulates employment relations, unless such relations are otherwise regulated by international treaties that have been implemented in Georgia. Employers are obliged to comply with requirements and clauses of the document for the purpose of ensuring that the rights of employees are protected.

38. **Law of Georgia on Labour Safety** define basic requirements and preventive measures in terms of workplace safety for the employers. The Law applies to jobs considered to be of increased danger, hard, harmful, and hazardous. The employer's compliance with the labor safety regulations in Georgia are overseen by the Ministry of Health, Labor and Social Affairs of Georgia through its respective departments.

39. **Procedures for Obtaining Environmental Impact Permit.** Environmental Assessment Code was adopted in June 2017 and entered into force from January 2018. The new code replaced law on Environmental Impact Permit and Ecological Expertise. Environmental Assessment Code sets up regulations and procedures for Environmental Impact Assessment, Strategic Environmental Assessment, Trans-boundary Environmental Assessment Public Participation and Expertise in the Decision-Making Process. The EIA shall be subject to the activities envisaged by the Annex I of this Code and the activities envisaged by the Annex II of the same Code, which will be subject to EIA on the basis of screening procedure.

A.1 Environmental Regulations and Standards

40. Program will be implemented in compliance with the national regulations and also in line with the ABD SPS 2009 requirements. Therefore, more stringent requirements of the two are applicable. Georgia has a large set of specific standards that refer to emission, effluent, and noise standards, as well as standard to handle and dispose specific wastes ranging from sewage to hazardous wastes. The following summarizes these laws and standards along with IFC and EU standards.

A.1.1. Ambient Air Quality Standards

41. In accordance with the Law of Georgia on Public Health, the environmental qualitative norms are approved by Decrees of the Minister of Labor, Health and Social Affairs of Georgia (Decrees Nos. 297/N of 16.08.2001, including the changes made to it by further decrees of the Ministry Nos. 38/N of 02.24.2003, 251/N of 09.15.1006, N of 12.17.2007). The quality of atmospheric air (pollution with hazardous matter) is also defined by the order of the Minister of Environment Protection and Natural Resources (#89, 23 October 2001) on approval of the rule for calculation of index of pollution of atmospheric air with hazardous pollution. Maximum permissible concentrations (MPC) for air born pollutants are set by Technical Regulations – Ambient air quality standards (Ordinance #383 - approved by GoG on 27 July, 2018).

42. Table 8 shows the threshold values of the major air pollutants as defined by the GEO, IFC and EU legislation.

Table 2. Ambient Air Quality Standards

Parameter	Averaging Period	Limit (µg/m ³)		
		Maximum Permissible Concentration (MPC) for Air Quality	IFC Guideline Value	EU Ambient Air Quality Guidelines
Nitrogen Dioxide (NO ₂)	30 minutes	200	-	-
	1 Hour	200 µg /m ³	200	200
	24 Hours	40	-	-
	1 Year	40 µg /m ³	40	40
Sulphur Dioxide (SO ₂)	10 minutes	-	500	-
	30 minutes	500	-	-
	1 Hour	-350 µg /m ³	-	350

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

Note: World Health Organization (WHO) Air Quality Guidelines Global Update, 2005. PM 24-hour value is the 99th percentile. Interim targets are provided in recognition of the need for a staged approach to achieving the recommended guidelines.

43. In general, Georgian standards for ambient air correspond to international IFC/WB standards, however in case of differences more stringent standards are applicable.

A.1.2. Noise Standards:

44. Admissible noise standards of the IFC and Georgian national standards for residential areas are similar. The national standards for noise are set according to the Technical regulation – Acoustic noise limits for rooms/premises in residential houses and public establishments (Document #300160070.10.003.020107, Date 15/08/2017) see Table 9.

45. For IFC noise impacts should not exceed the levels presented in Table 5 or result in a maximum increase in background levels of 3 decibels (dB) at the nearest receptor location off site. This program will comply with both IFC Guidelines and Georgian Standards. Note that Georgian standards refer to the allowable limits indoors, not at the building façade.

Table 3: Georgian Standards for Noise Levels

Purpose/use of area and premises	Allowable limits (A-Weighted Decibels (dBA))		
	L _{day}		23:00 – 08:00
	08:00 - 19:00, Day	Evening 19:00-23:00	L _{night} , Night
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 ($\leq 100\text{m}^3$) – working rooms and premises without office equipment	40	40	40
Small offices ($\leq 100\text{m}^3$) – 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 facilities (<6 story buildings)	50	45	40
Areas bordering with houses residential, medical establishments, social service, and children facilities (>6 story buildings)	55	50	45
The areas bordering with hotels, trade, service, sport, and public organizations	60	55	50

Note: 1. in case noise generated by indoor or outdoor sources is impulse or tonal, the limit must be 5dBA less than indicated in the table.

2. Acoustic noise limits given above are set for routine operation conditions of the 'space', i.e. windows and door are closed (exception – built-in ventilation canals), ventilation, air conditioning, lighting (in case available) are on; functional (baseline) noise (such as music, speech) not considered.

Table 4: IFC Noise Level Guidelines

Receptor	One-hour L_{aeq} (dBA)	
	Daytime 07.00-22.00	Night-time 22.00 – 07.00
Residential; institutional; educational	55	45
Industrial; commercial	70	70

46. For workplace noise the following IFC standards are applicable.

Table 5: IFC Work Environment Noise limits

Type of Work, workplace	IFC General EHS Guidelines
Heavy Industry (no demand for oral communication)	85 Equivalent level L_{aeq} , 8h
Light industry (decreasing demand for oral communication)	50-65 Equivalent level L_{aeq} , 8h

A.1.3. Vibration Standards

47. The Georgian Standards for vibration are designed for human comfort. These are shown in Table 12. Note that no standards for building damage exist.

Table 6: Georgian General Admissible Vibration Values in Residential Houses, Hospitals and Rest Houses, Sanitary Norms 2001

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
Corrected and equivalent corrected values and their levels	4.0	72	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.

48. The American Association of State Highway and Transportation Officials (AASHTO) (1990) identifies maximum vibration levels for preventing damage to structures. **Error! Reference source not found.**13 summarizes the maximum levels.

Table 7: AASHTO Maximum Vibration Levels for Preventing Damage

Type of Situation	Limiting Velocity (in/sec)
Historic sites or other critical locations	0.1
Residential buildings, plastered walls	0.2-0.3
Residential buildings in good repair with gypsum board walls	0.4-0.5
Engineered structures, without plaster	1.0-1.5

49. **Soil Quality:** In Georgia, soil quality evaluation criteria are determined by instructions on "Level of Chemical Contamination of Soil" (MM 2.1.7. 004-02). Information on maximum admissible concentrations of various substances and elements in soils are given in the Table 14.

Table 8: Maximum admissible concentrations of various substances and elements in soils

Component	Unit	Level
Arsenic	mg/kg	2-10
Copper	mg/kg	3
Mercury	mg/kg	2.1
Nickel	mg/kg	4
Lead	mg/kg	32
Zinc	mg/kg	23
Compound Hydrocarbons	mg/kg	0.1
Phenol (Compound)	mg/kg	-
Cyanide	mg/kg	-
Sulphate	mg/kg	-
Chloride	mg/kg	-
Ammonium Nitrogen	mg/kg	-
Evaporable Organic Compounds		
Benzoyl	mg/kg	0.3
Toluene	mg/kg	0.3

Component	Unit	Level
Ethylbenzene	mg/kg	-
Compound Xylene (ortho, meta, para)	mg/kg	0.3
semi-Evaporable Compounds		
Benzopyrene	mg/kg	0.02
Isopropylbenzol	mg/kg	0.5
Pesticides		
Atrazine	mg/kg	0.5
Linden	mg/kg	0.1
DDT (and its metabolite)	mg/kg	0.1

A.1.4. Groundwater quality standards: Georgian legislation does not regulate quality standards for groundwater. Quality of groundwater is regulated by norms set for potable water.

50. Potable water quality criteria are determined by technical regulations on potable water (Government Regulation N 58 from January 15, 2014 Potable water quality criteria are given in Table 15.

Table 9: Potable Water Criteria

Index	Measuring unit	Standard not more than:
Common characteristics		
Hydrogen index	PH	6-9
Permanganate oxidation	mg O ₂ /L	3,0
Nonorganic substance		
Barium (Ba ²⁺)	mg/L	0.7
Boron (B, total)	mg/L	0.5
Arsenic (As, total)	mg/L	0.01
Quicksilver (Hg, nonorganic),	mg/L	0.006
Cadmium (Cd, total)	mg/L	0.003
Mangan (Mn, total)	mg/L	0.4
Molybdenum (Mo, total)	mg/L	0.07
Nickel (Ni, total)	mg/L	0.07
Nitrate (short impact by NO ₃ ⁻)	mg/L	50
Nitrite (long impact by NO ₂ ⁻)	mg/L	0.2
Selenium (Se, total)	mg/L	0.01
Copper (Cu, total)	mg/L	2.0
Lead (Pb, total)	mg/L	0.01
Fluorine (F ⁻)	mg/L	0.7
Chromium (Cr ⁶⁺)	mg/L	0.05
Antimony (Sb)	mg/L	0.02
Cyanide (CN ⁻)	mg/L	0.07
Organic substance		
Total content of pesticides	mg/L	0.05

A.1.5. Surface Water Quality Standards

51. The values of Maximum Admissible Concentrations of the harmful substances in surface are provided in the Environmental Quality Norms approved by the Order #297N (16.08.2001) of the Ministry of Labor, Health and Social Protection (as amended by the Order No 38/n of the same Ministry of 24.02.2003). The admissible level of pollutants in surface water is given in **Error! Reference source not found.** 16. All effluents shall comply with the Georgian National Standards.

However certain parameters are not specified in the national standards for these IFC Guidelines are being used as shown in the Table 16.

Table 10: Applicable Standards for Surface Water Quality

Parameter	Maximum concentration	Permissible Source
pH	6.5-8.5	National
Diluted Oxygen, mg/l	4-6	National
BOD5, mg/l	30	IFC
COD, mg/l	125	IFC
Total Nitrogen, N, mg/l	10	IFC
Total Phosphate, mg/l	2	IFC
Chlorides, mg/l	350	National
Oil Products, mg/l	0.3	National
Zinc (Zn ²⁺)	1g/kg	National
Lead (Pb total)	23.0	National
Chrome (Cr ⁶⁺)	32.0	National
Cadmium (Cd, total)	6.0	National
Total Suspended Solids, mg/l	50	IFC

52. Quality requirements depend on category of water body (ref. Technical regulations of protection of surface water from pollution, approved by decree #425 of the government of Georgia, 31/12/2013). The categories are: (a) household water use; (b) domestic water use; and (c) fisheries. The latter, in its turn, splits in highest, first and second categories.

Table 11: Water Quality Requirements by Water Use Category

	Water use category			
	Household water use	Domestic water use	Fisheries	
			Highest and first	Second
	Increase not higher that listed below is allowed			
Suspended solids	0.25 mg/l	0.75 mg/l	0.25mg/l	0.75 mg/l
	For rivers with natural content of suspended solids 30mg/l, around 5% increase is allowed			
	If wastewater contains suspended particles with deposition rate above 0.2mm/sec discharge in water reservoirs is not allowed. Discharge of effluents containing suspended particles with deposition rate above 0.4mm/sec is prohibited.			

	Water use category			
	Household water use	Domestic water use	Fisheries	
			Highest and first	Second
Floating matter	Patches and films of oil, petroleum products, fats must not be detectable			
Colour	Must not be visible in water column		Water must not have unusual colour	
	20 cm	10 cm	-	
Odour, taste	Water must not have odour and taste of higher than 1-unit intensity		Water must not result in unusual odour and taste in fish	
	After chlorination of other treatment	Without treatment	-	
Temperature	After discharge of wastewater, temperature in water reservoir must not exceed by more than 5 percent compared to the natural value		For water bodies, representing an habitat for cold water fish such as <i>Acipenseridae</i> , <i>Coregonidae</i> , maximum allowable temperatures in summer and winter are 20°C and 5°C respectively, while for other water bodies - 28°C (in summer), 8°C (in winter).	
pH	Must be in 6.5 - 8.5 interval			
Water mineralisation	<1000mg/l, Incl. chlorides – 350mg/l; sulphates - 500mg/l	To comply with requirement given in section related to taste (see above)	In accordance with taxation	
Dissolved oxygen	Must not be lower than			
	4 mg/l	4 mg/l	6 mg/l	6 mg/l
Biological oxygen demand	At 20°C must not exceed			
	3 mg/l	6 mg/l	3 mg/l	6 mg/l
Chemical oxygen demand	Must not exceed			
	15 mg/l	30 mg/l	-	-
Chemical substances	Must not exceed maximum permissible limits			
Pathogens	Must be free for pathogens, including viable helminth eggs, tenia oncosperes and viable cysts of pathogen organisms			

	Water use category			
	Household water use	Domestic water use	Fisheries	
			Highest and first	Second
Toxicity	-	-	At the point of discharge and control section of the river toxic impact must not be observed.	

A.1.6. Sanitary Wastewater

53. Sanitary wastewater from industrial facilities may include effluents from domestic sewage, food service, and laundry facilities serving site employees. Miscellaneous wastewater from laboratories, medical infirmaries, water softening etc. may also be discharged to the sanitary wastewater treatment system. Recommended sanitary wastewater management strategies include:

- i. Segregation of wastewater streams to ensure compatibility with selected treatment option (e.g. septic system which can only accept domestic sewage);
- ii. Segregation and pre-treatment of oil and grease containing effluents (e.g. use of a grease trap) prior to discharge into sewer systems;
- iii. If sewage from the industrial facility is to be discharged to surface water, treatment to meet national or local standards for sanitary wastewater discharges or, in their absence, the indicative guideline values applicable to sanitary wastewater discharges shown in Table 18;
- iv. If sewage from the industrial facility is to be discharged to either a septic system, or where land is used as part of the treatment system, treatment to meet applicable national or local standards for sanitary wastewater discharges is required. Sludge from sanitary wastewater treatment systems should be disposed in compliance with local regulatory requirements, in the absence of which disposal has to be consistent with protection of public health and safety, and conservation and long term sustainability of water and land resources. It should be mentioned also that the most stringent standards will apply during construction.

Table 12. Indicative Values for Treated Sanitary Sewage Discharges

Pollutant	Unit	Standards		
		GEO	WB	EU
pH	pH	6-9	6-9	
Biochemical oxygen demand (BOD)	mg/l	35	30	25
Chemical Oxygen Demand (COD)	mg/l	125	125	125
Total Phosphorus	mg/l	2	2	2
Total Nitrogen	mg/l	15	10	15
Total Suspended Solids	mg/l	60	50	35
Coliform bacteria	[1]MPN ^b /100ml		400 ^a	

B. ADB Policies

54. Superseding the previous safeguard policies (the Involuntary Resettlement Policy, 1995, the Policy on Indigenous Peoples, 1998, and the Environment Policy 2002), ADB, has adopted a comprehensive Safeguard Policy Statement in 2009 (SPS, 2009). The SPS describes common objectives of ADB's safeguards, lays out policy principles, and outlines the delivery process for

ADB's safeguard policy. It applies to all ADB-financed, ADB administered projects, and their components including investment projects funded by a loan, grant or other means.

55. With the goal to promote sustainability of project outcomes by protecting the environment and people from projects' potential adverse impacts, the objectives of ADB's safeguards are to:

- (i) avoid adverse impacts of projects on the environment and affected people, where possible;
- (ii) minimize, mitigate, and/or compensate for adverse project impacts on the environment and affected people when avoidance is not possible; and
- (iii) help borrowers/clients to strengthen their safeguard systems and develop the capacity to manage environmental and social risks.

56. ADB's SPS 2009, sets out the policy objectives, scope and triggers, and principles for three key safeguard areas: (i) environmental safeguards, (ii) involuntary resettlement safeguards, and (iii) indigenous peoples safeguards.

57. **Environmental Safeguards.** The objective of environmental safeguards is to ensure the environmental soundness and sustainability of projects and to support the integration of environmental considerations into the project decision-making process. All ADB funded projects are screened at initial stages of preparation and categorized according to significance of a project's potential environmental impacts. For screening of projects special Rapid Environmental Assessment (REA) Checklist is used. Projects are assigned to one of the following three categories:

- (i) **Category A** - A proposed project is classified as category A if it is likely to have significant adverse environmental impacts that are irreversible, diverse, or unprecedented. These impacts may affect an area larger than the sites or facilities subject to physical works. An environmental impact assessment is required.
- (ii) **Category B** - A proposed project is classified as category B if its potential adverse environmental impacts are less adverse than those of category A projects. These impacts are site-specific, few if any of them are irreversible, and in most cases mitigation measures can be designed more readily than for category A projects. An initial environmental examination is required
- (iii) **Category C** - A proposed project is classified as Category C if it is likely to have minimal or no adverse environmental impacts. No environmental assessment is required although environmental implications need to be reviewed.

58. ADB's environmental assessment requirement is thus different from the Georgian system of environmental assessment. While Environment Impact Permit as per the Georgian Law is required only for notified activities, ADB SPS 2009 applies to all projects and its environmental assessment requirement varies according to the category of the project depending on the nature and scale of the anticipated impacts.

B.1. Accountability Mechanism²

59. The Asian Development Bank (ADB) created the Inspection Function in 1995 to provide an open forum for public scrutiny to ensure that ADB complies with its operational policies and procedures. Building on the Inspection Function and benefiting from intensive public consultations, ADB introduced the updated Accountability Mechanism in 2012. The Accountability Mechanism encompasses two mutually supportive functions: problem solving and compliance review.

60. The Accountability Mechanism is designed to:

² ADB's Accountability Mechanism Policy 2012 is available at: <http://www.adb.org/documents/accountability-mechanism-policy-2012>

- Increase ADB's development effectiveness and project quality;
- Be responsive to the concerns of project-affected people and fair to all stakeholders;
- Reflect the highest professional and technical standards in its staffing and operations;
- Be as independent and transparent as possible;
- Be cost-effective and efficient; and
- Be complementary to the other supervision, audit, quality control, and evaluation systems at ADB.

61. The Accountability Mechanism complements other problem solving and compliance systems at ADB audit, evaluation, and learning systems to ensure that its operations are conducted in accordance with operational policies and procedures, and deliver the intended results.

62. It reflects ADB's philosophy that problem prevention and compliance should be maximized in its operations, and also that once problems and noncompliance occur, they should be addressed promptly at the project and operational levels.

B.2. Information Disclosure:

63. In line with ADB's Access to Information Policy (September 2018), ADB works closely with its borrowers and clients to ensure two-way communications about ADB projects with project-affected people and other stakeholders. This is done within a timeframe, using relevant languages, and in a way that allows project-affected people and other stakeholders to provide meaningful inputs into project design and implementation.

64. ADB will post the following safeguard documents on its website:

- (i) for environment category A projects, draft environmental impact assessment reports at least 120 days before Board consideration;
- (ii) draft Environmental Assessment and Review Framework (EARF), draft Resettlement Frameworks and/or plans, and draft Indigenous Peoples planning frameworks and/or plans before project appraisal;
- (iii) final or updated environmental impact assessments and/or initial environmental examinations, resettlement plans, and Indigenous Peoples plans upon receipt;
- (iv) environmental, involuntary resettlement, and Indigenous Peoples monitoring reports submitted by borrowers/clients during project implementation upon receipt.

B.3. Comparison of the National legislation and ADB Requirements

98. The above accounts of national environmental law and ADB policy indicate that the two systems are similar but then there are some aspects in which ADB policy is more specified than the Georgian procedure. The main differences are as follows.

99. Considering ecological risk, cultural heritage, resettlement and other factors, the Bank classifies projects supported by them under categories A, B, C and FI. In the Georgian legislation, EIA is carried out within the scope of the activities provided for by Annex I to the New Environmental Assessment Code, and of the activities provided for by the Annex II to the same Code, according to a screening decision. Asian Development Bank guidelines requires EIA for category A projects, IEE for the B category projects, and an environmental review of projects that are not expected to produce environmental impacts (category C), while According to the Georgian legislation IEE is not required.

100. Georgian legislation does not specify the format of environmental management plans as well (EMPs) and the stage of their provision for projects requiring EIA and does not require EMPs for projects not requiring EIAs. The Asian Development Banks guidelines requires EMPs for all

categories of projects and provides detailed instructions on the content.

101. According to Georgian legislation MEPA is responsible for monitoring of project implementation and compliance with the standards and commitments provided in the EIA, and the role of the EMP is less clearly defined. The IPMO or “Project Proponent” is responsible for implementing “self-monitoring” programs for projects requiring EIA. In contrast ADB guidelines stress the role of EMPs, which are important for all categories of projects, and the Project Proponent is required to ensure inclusion of a monitoring scheme and plans into EMPs. Monitoring of performance compliance against EMPs is important element of ADB requirements.

102. The national legislation also does not take into account the issue of involuntary resettlement at any stage of environmental permit issuance. The Georgian legislation considers social factors only in regard to life and health safety (e.g. if a project contains a risk of triggering landslide, or emission/discharge of harmful substances or any other anthropogenic impact). While the Bank’s document establishes the responsibility of a Borrower for conducting an environmental assessment, the national legislation provides for the responsibility of a project implementing unit to prepare EIA and ensure public consultation.

103. Ministry is participating in public consultation required for the adoption of a decision on issuing an EIA permit as established under the new Code of Georgia. ADB carry out project screening and categorization at the earliest stage of project preparation when sufficient information is available for this purpose, also according Access to Information Policy of ADB. The Bank is committed to working with the borrower/client to ensure that relevant information (whether positive or negative) about social and environmental safeguard issues is made available in a timely manner.

104. In regard with consultation: The Bank provides for consultations for A and B Category projects (at least two consultations for Category A projects) and requires a timetable of consultations from the Borrower. The national legislation until recently contained only a brief reference to this issue without providing real tools of its fulfilment.

105. The Bank’s guidelines provide a detailed description of procedures for screening, scoping and conducting EIA and explain a complete list of stages, which are not specified under the national legislation.

106. The Environmental Assessment Code, which was adopted in June 2017 and entered into force in January 2018 includes screening, scoping, preparing an EIA report, public participation, carrying out consultations and preparing an expert opinion on the basis of the evaluation of the results obtained, and taking account of the expert opinion in issuing an environmental decision under this Code and/or a respective enabling administrative act as provided for by the legislation of Georgia.

107. Environmental impact assessment falls within the scope of the activities provided for by Annex I to this Code, and of the activities provided for by the Annex II to the same Code, according to a screening decision.

108. Screening Stage: A person carrying out activities shall, as early as possible at the stage of planning an activity, submit to the Ministry an application for the screening of the planned activity and obtain from the Ministry a decision on whether the planned activity is subject to an EIA.

109. Within three days after a screening application has been registered, the Ministry shall have the application placed on its official website and on the notice board of the executive body and/or representative body of a respective municipality, and upon request, shall make a printed copy available under a procedure established by the legislation of Georgia. The public may, within seven days after the screening application has been placed on the website and the notice board, submit to the Ministry opinions and comments with respect to the application under the procedure established by Article 34(1) of this Code. The Ministry shall review the opinions and comments submitted by the public and, if there are appropriate grounds, shall take them into account when making a decision on the screening.

110. Scoping Stage: A person carrying out activities shall, as early as possible at the stage of planning an activity, file with the Ministry a scoping application along with a scoping report.

111. Within three days after a scoping application has been registered, the Ministry shall have the scoping application and the scoping report placed on its official website and on the notice board of the executive body and/or representative body of a respective municipality, and upon request,

shall make printed or electronic copies available under a procedure established by the legislation of Georgia.

112. The public may, within 15 days after the placement of the scoping application submit to the Ministry opinions and comments with respect to the scoping report. When issuing the scoping opinion, the Ministry shall ensure a review of the opinions and comments submitted by the public and, if there are appropriate grounds, take them into account.

113. Not earlier than the 10th day and not later than the 15th day after the placement of the scoping application under the procedure established by Article 8(2) of this Code, the Ministry shall ensure the holding of a public review of the scoping report. The Ministry shall be responsible for organizing and holding public reviews. Public reviews shall be led, and the minutes of public reviews shall be drafted, by a representative of the Ministry. Information on the public review shall be published not later than 10 days before the public review is held, in accordance with Article 32 of this Code. Public reviews shall be open and any member of the public may participate in them.

114. After the Ministry approves the scoping opinion, the person carrying out activities and/or an adviser shall ensure the preparation of an EIA report. The person carrying out activities shall ensure the reimbursement of the costs necessary for preparing an EIA report. the Ministry shall have EIA information on its official website and on the notice board of the executive body and/or representative body of a respective municipality.

115. The public may, within 40 days after the placement of the application, submit to the Ministry opinions and comments under the procedure established by Article 34(1) of this Code with respect to the EIA report, the planned activity and the conditions to be included in the environmental decision. When making an environmental decision or a legal act refusing the carrying out of the activity, the Ministry shall ensure the review of the opinions and comments submitted and, if there are appropriate grounds, take them into account.

116. Not earlier than the 25th day and not later than the 30th day after the placement of the application under the procedure established by Article 11(3) of this Code, the Ministry shall hold a public review of the EIA report. The Ministry shall be responsible for organizing and holding reviews. Public reviews shall be led, and the minutes of public reviews shall be drafted, by a representative of the Ministry. The Ministry shall be responsible for the accuracy of the minutes. Information on the public review shall be published not later than 20 days before the public review is held, in accordance with Article 32 of this Code.

117. Not earlier than the 51st day and not later than the 55th day after the registration of an application for obtaining an environmental decision, the Minister shall issue an individual administrative act on the issuance of an environmental decision or, if there exist grounds provided for by Article 18 of this Code, on the refusal of the carrying out of the activity. When making environmental decisions, the guideline document on Environmental Impact Assessment may be used.

Table 13: Activities and responsibilities in EIA for national law and ADB policy

#	Action	Georgian Legislation	ADB Requirements
1	Screening	Consultant hired by Project Proponent	Bank and Consultant hired by Project Proponent
2	Scoping	Consultant hired by Project Proponent.	Obligatory. Bank and Consultant hired by Project Proponent
3	Draft EIA	To be prepared by Environmental Consultant.	To be prepared by Environmental Consultant.

#	Action	Georgian Legislation	ADB Requirements
4	Public Consultations	Not earlier than the 25th day and not later than the 30th day after the placement of the application under the procedure established by Article 11(3) of this Code, the Ministry shall hold a public review of the EIA report. Public reviews shall be led, and the minutes of public reviews shall be drafted, by a representative of the Ministry. Information on the public review shall be published not later than 20 days before the public review is held, in accordance with Article 32 of this Code.	At least two consultations for Category A projects – one at the scoping stage and one for the draft EIA.
5	Final EIA	Consider all comments received during public consultations, incorporate accepted remarks and explain rational when the comments are disregarded.	Consider all comments from Bank and public. Agree with the Bank on each raised point. Incorporate accepted public comments and explain rational when the comments are disregarded.
6	Management Plans	clear guidelines on format, content and timing	Incorporate Monitoring and Management Plans in the EIA.
7	Review and Approval	MEPA	Bank and separately – MEPA (if the EIA is required by Georgian legislation).
8	Disclosure of the final EIA	Not requested	Publication (mainly electronic) of the final EIA.

B.4. Harmonization of the ADB and Georgian Legislation Requirements

118. In order to comply with the both regulations – the ADB and Georgian legislation – the content of the EIA should comprise issues required in both regulations, thus complementing each other. The EMPs should therefore be elaborated as required by the ADB regulations. The assessment of the stationary sources of emission (e.g. diesel generators) should be executed according to Georgian regulations: “Inventory of the Stationary Sources of Emission” and “Approval of the Emission Limits”. For the category A projects the first public consultation (requested by ADB guidelines, but not by Georgian regulations) will be held at the Scoping stage. The second one will be executed according to Georgian requirements. Disclosure will be conducted as required by ADB.

III. ASSESSMENT OF INSTITUTIONAL CAPACITY FOR IMPLEMENTATION OF ENVIRONMENTAL SAFEGUARDS

119. Following agencies will be involved in implementing the Investment Program:

- Ministry of Regional Development and Infrastructure (MoRDI);
- Municipal Development Fund of Georgia (MDFG)
- Consultants
- Supervision Company (SC)
- Construction Company (CC)

A. Ministry of Regional Development and Infrastructure (MoRDI)

120. Ministry of Regional Development and Infrastructure (MoRDI) is the Executing Agency (EA) responsible for management, coordination and execution of all activities funded under the loan. MoRDI will have overall responsibility for compliance with loan covenants.

B. Municipal Development Fund of Georgia (MDFG)

121. Municipal Development Fund of Georgia (MDFG) is the project Implementing Agency (IA), responsible for administration, implementation (design, construction) and all day-to-day activities under the loan.

122. The Municipal Development Fund of Georgia was established in 1997. The Fund is cooperating with all large investment banks and financial institutions operating in Georgia. It is coordinated by the Supervisory Board approved by the Government of Georgia and the Ministry of Regional Development and Infrastructure of Georgia (MoRDI).

123. The Municipal Development Fund of Georgia (MDF) is a Legal Entity under Public Law (LEPL) with the objective of assisting to enhancement of institutional and financial capacities of local self-governmental bodies, making investments in local infrastructure and services, and improvement of main economic and social conditions for the local population. MDF implements the significant infrastructural projects such as: urban renovation of the cities, arrangement of infrastructure at tourist and cultural heritage monuments, construction and rehabilitation of schools and kindergartens, improvement of infrastructure aimed at preventing the natural disasters, creation of sustainable economic base for IDPs, rehabilitation of WS and WSSs, construction of shelters for homeless animals, arrangement of the cable ways, renovation of sports infrastructure, and enhancement of the component in support of State and Private Sector Investments (PPI). Organizational Chart of MDF is presented in **Annex 1**.

124. The main department responsible for implementation of environmental and social issues, EARF in MDF is Environmental Protection and Resettlement Unit operated under control of Executive Director. Environmental and Resettlement team members consists: Head of Unit, 3 environmental safeguards specialists, one social safeguards and gender specialist, one Beneficiary Relations Specialist, one resettlement and GIS specialist, 2 resettlement specialists and two ADB's individual consultants (one on resettlement issues and the other for communication matters), who also are the members of Environmental and Resettlement Unit.

125. The responsibilities of the head of **Environmental Protection and Resettlement Unit** are the following:

- Lead the implementation of environmental policies and practices;
- Ensure compliance with the ADB's safeguard policies and the national environmental legislation;
- Control quality and adequacy of environmental and social reports;
- Ensure due involvement of the Safeguards Unit staff into all operations of MDF that require inputs related to safeguard policy application;
- Evaluate environmental performance under the MDF-implemented activities and ensuring quality of reporting on the application of safeguard policies to internal and external clients and regulatory bodies;
- Alert the MDF management on significant issues revealed through monitoring of safeguards performance of contractors and recommending remedial action;

- Ensure disclosure of safeguards documents according to the guiding principles set forth in EARF; coordinate consultation with stakeholders on environmental documentation and any environmental and social aspects of the MDF's activities that affected people may be interested in; and take decision on the incorporation of public feedback into safeguards documents;
- Oversee operation of the GRM and ensure its viability;
- And so on.

126. The responsibilities of **MDF's Environmental Specialists** are following:

- Ensure that all relevant EMP requirements (including environmental designs and mitigation measures) are duly incorporated into the project bidding documents;
- Ensure that Contractor obtains necessary permits and/or clearance, as required, from MoEPA and other relevant government agencies. All necessary regulatory clearances should be obtained before commencing any civil work on the project;
- Ensure that contractor has access to the EMP and IEE report;
- Ensure that contractor understands its responsibilities to mitigate environmental problems associated with their construction activities and facilitate training of their staff in implementation of the EMP;
- Approve the Site-Specific Environmental Management Plan (SSEMP) prepared by the Contractor before he takes possession of construction site;
- Monitor the contractor's implementation of the SSEMP in accordance with the environmental monitoring plan;
- Submit semi-annual Environmental Monitoring Reports to ADB;
- In case unpredicted environmental impacts occur during the project implementation, prepare and implement as necessary an environmental emergency program in consultation with MoEPA, any other relevant government agencies, and ADB;
- Ensure that Contractor hires specialized companies to manage asbestos waste disposal and safe operations on dismantling, transportation and storage of oil contaminated equipment of gas filling stations. The other choice is to request Construction Contractor to hire the mentioned waste and pollution Management Company and to insert this requirement in Civil Works Contract.
- And so on.

B.1.Responsibilities of Consultants

127. The responsibilities of **MDF's Communication consultant** are following:

- Provide overall strategic and operational communication guidance to the projects;
- Support the preparation and implementation of the Stakeholder Communication Strategy (SCS) and information sharing;
- Actively work with designated MDF staff to build their capacity to effectively carry out the activities set forth in the communication plans;
- Actively work with designated MDF staff to help manage public relations, and share information regarding GRMs (Grievance Redress Mechanisms) with an emphasis on social safeguards.
- Specific consultations with the vulnerable groups on an individual household basis; Describing to the APs the proposed construction methodology with respect to noise, vibration and dust control; developing a plan of support for the construction period; Ascertaining what are the main concerns of the APs, especially during this construction period;
- Support and build a network of community contacts trusted by different stakeholder groups to foster dialogue and information sharing. These contacts will serve as "community liaisons" and support SCS implementation.
- Support, and where needed, organize or facilitate, interactions between project staff and other stakeholders, pursuant to the activities set forth in the SCS. Join consultations

conducted by MDF to help ensure questions and concerns identified during these interactions are meaningfully addressed. Facilitate relationship-building between communities and MDF / project implementation staff involved in the project. Maintain regular contact with these stakeholders. Provide communications support for other project activities (safeguard, grievance, etc.) as needed. Coordinate with GRMs to ensure stakeholder concerns are identified, logged, and that key stakeholders understand how their inputs are being shared and responded to.

- As needed, revise and/or prepare information materials regarding to new projects, in coordination with designated MDF and ADB staff;
- Ensure a regular flow of information about the project to affected persons and other key stakeholders. Support the establishment of public notice boards in villages/communities affected by projects. Ensure project phone hotline numbers are posted in appropriate locations, with named focal persons provided (project communication focal points). Help ensure key project documents are posted on the notice boards and in local government offices (village, district, etc.);
- Ensure interested stakeholders and the broader public are informed about the project, including the grievance redress mechanism, through a full range of communication channels, including social and traditional media. Also explore opportunities for briefings and outreach amongst donor community and CSO representatives
- Ensure that all project beneficiaries are fully informed of their rights and of the procedures for giving feedback and addressing grievances
- And so on.

128. The responsibilities of **MDF's Local Resettlement Consultant** are following:

- Revision of the LARP and other resettlement documents prepared and submitted to MDF by consulting company; Sending documentation to ADB safeguard specialist for review and/or No Objection;
- Organization of public meetings and focus groups, including identification of venues, notices to participants, establishment of agenda, establishment of minutes and photographic records, signatures of lists of attendance;
- Participate in the implementation resettlement process. Revision addendums of the LARP (if needed)
- Participation in public meetings and focus groups, follow up with preparation of respective documents including minutes and photographic records, lists of attendance;
- Provision of Information to local authorities on Project and LARF policies (if needed);
- Provision of the consulting services to the Project Affected Persons (APs) on the issues dealing with the Public Registry, and other issues reflected in LARP if needed (provide with current information about LARP activities);
- Provision of cadastral drawings and electronic versions to the APs;
- Assistance to the AP in establishing bank accounts and preparation of other documentation needed for the contracts;
- Timely submission of registration results and prepared material to MDF for further procedures;
- Monitoring of registration procedures held by the AP at the Public Registry for acceleration of the abovementioned procedures;
- Participation in demarcation and inventory works if needed, approval of the results and submission to MDF;
- Participation in the negotiations of compensation with APs; Consultation to MDF regarding expropriation issues; Informing and consulting AP-s about expropriation process and results; Organizing meetings between MDF and AP-s in order to avoid expropriation; Preparation/Collection of necessary documentation required for expropriation Procedures; Monitoring the expropriation process
- Development/management/monitoring of the Grievance Redress Mechanism on the local level: Logging of grievances; Participation in the Grievance review processes; Engagement

- with aggrieved individuals; Ensuring that grievances are acknowledged receipt of and responded; Feedback to aggrieved people (in writing and through direct engagement) on the results of the internal grievance review; Communication with GRC Secretary. Revision of Compliance Report for LARPs (if needed);
- And so on.

B.2. Environmental Management Consultant (EMC)

129. If MDF does not have a specialist with environmental background, ADB recruited Environmental Management Consultant (EMC), who closely cooperates with MDF and is responsible for development of all required environmental documentations, according to ADB requirements
130. The responsibilities of MDF's **Environmental Management Consultant (EMC)** will include, but not limited to:
- Assist the MDF in program implementation in compliance with EARF;
 - Assist in fulfilling safeguard related loan covenants, if any.
 - Assist MDF in project screening & categorization, overseeing the IEE/EIA Process including public consultation and disclosure in compliance with ADB SPS.
 - Assist MDF in review of IEEs/EIAs Reports.
 - Assist the MDF in consolidating monthly monitoring reports and submit bi- annual reports to ADB for review.
 - Oversee environmental management activities - ensure all mitigation measures as specified are integrated into design and contract documents as required, and are actually and affectively implemented.
 - Assist MDF in period update/revision of EARF.
 - Involved in the process of monitoring of EMP mitigation measures implementation, which is implemented by Construction Supervision Department and Technical Supervision Company, which is really a conflict of interest.

B.3. Responsibilities of Occupational Health and Safety Unit (OHSU)

131. Occupational Health and Safety Unit (OHSU) is also operated in MDF. The Head of Occupational Health and Safety Unit organizes oversight on the safety at work sites and compliance of labor conditions with the national legislation and terms of contract for the provision of works. Based on the assessment of risks observed at work sites, the Head takes decision on giving notice to contractor or suspension of works, issues guidance for corrective action and monitors its implementation.
132. The responsibilities of **MDF's Occupational Health and Safety Unit (OHSU)** are following:
- prevents violation of occupational safety rules within the Company;
 - Introduces respective standards of occupational health and safety and develops recommendations to protect occupational safety and health;
 - Reports to Company's Directorate about risks associated with occupational safety and prevention measures thereof, and handling hazardous equipment;
 - Provides scheduled trainings on occupational safety to employees and issues respective certificate;
 - Keeps/archives personnel training log.
 - and others.

B.4. Responsibilities of Project Manager

133. The responsibilities of **MDF's Project Manager** are following:
- Project management, control and monitoring;
 - Communicate with stakeholders at all stages of the project;
 - Coordinating the parties involved in the project;
 - Establishing effective business relationships with donor and / or government agencies,

- conducting close communication, and reporting;
- Organizing and participating in various meetings and negotiations related to the project;
- Arranging visits at project sites to assess the progress of the Project;
- Study the reports submitted by the contractor and coordinate with the relevant units;

C. Supervision Company (SC)

134. The MDF as responsible IA for the project recruited a Supervision Company (SC). The national and international team of consultants will assist MDF. The SC will also provide capacity building training to contractor staff for management and operation, and maintenance of the Project (if needed). The SC will assist MDF in assuring that the project is implemented according to the specified standards. This SC assignment will include the supervising of the implementation of safeguard documentation.
135. All mitigation measures during construction have to be implemented by the contractor; that will be monitored by the SC. Implementation of safeguard documentation requires an experienced Environmental/ Social Management Specialist (ESMS), who will be employed by the SC.
136. The responsibilities of **Supervision Company (SC)** are following:
- Conduct Surveys and prepare quarterly reports;
 - Ensuring Contractors' good command of the requirements laid out in Environmental documentation and tracking adherence of Contractors' performance and advising Contractors on the corrective actions in case of identified environmental incompliances;
 - Issue notices to the contractor advising of any non-compliance with environmental mitigation measures, as set out in the contract documents. Copies of all notices should be provided to the Employer at the time of issue. Before issuing such notices the Engineer should, as appropriate, have advised the contractor of the non-compliance and given an opportunity to the contractor to make good any adverse impact prior to the notice being issued;
 - Monitor and report to MDF about implementation of Environmental Documentation in the course of works at each construction site; promptly notify the MDF on any deviations/violations of environmental requirements, on any complaints from local communities related to ongoing works, and on any unforeseen issues affecting environment and/or cultural heritage which may emerge in the course of works; recommend remedial and/or corrective measures to the MDF and follow up on their application upon the MDF's approval;
 - Oversee temporary on-site storage and final disposal of construction waste to the formally assigned sites or landfills and on the reinstatement of work sites upon completion of activity at any given one;
 - Notify the MDF on any complaints from the population affected by ongoing civil works;
 - Keep reporting related to social and resettlement (including temporary and permanently resettlement) issues and submit Georgian and English versions of reports to MDF. Monitor compliance of the project with the provisions preventing discrimination in employment, enforcing gender equality, and reducing risks of spread of communicable diseases; preventing human trafficking, and ensure that such requirements are included in the bid and contract documents;
 - Assistance to the MDF in monitoring the implementation of LARPs (if any) in compliance with the Asian Development Bank SPS and the Land Acquisition and Resettlement Framework (LARF) (if any) of the project, also ensuring Contractors' good command for the compliance requirements SPS 2009, LARPs and other social documents. Additionally, prepare any relevant safeguard documentation (if needed) in accordance with the ADB safeguard policy.
 - Carry out the monitoring as per ADB's SPS, 2009 in order the civil construction not to be executed beyond the construction area (construction buffer zone), and in case of occurrence of works execution beyond that site to require the Contractor to return to the designated

- buffer zone and reimburse the loss, if any.
- and others

D. Construction Company (CC)

137. The Construction Company appointed by the MDFG to undertake the works under the contract will be responsible for mitigating impacts resulting from the construction activities. The construction activities shall be monitored closely by the MDFG to ensure compliance with the temporary mitigating measures.
138. The responsibilities of **Supervision Company (SC)** will include, but not limited to:
- Fulfil the obligations and requirements set forth by the IEE;
 - Prevent damages on private property not covered by the IEE, and if such an event occurs, reimburse the loss with its own funds;
 - Provide compensation to the Project Affected Persons if the construction deadline is delayed, the supervisor will ensure the compensation to be paid by the construction company;
 - Engage an environmental consultant responsible for developing and implementing the construction phase EMP and for provision of corresponding information to MDF and SC;
 - Prepare SEMP;
 - Develop, if required, a Soil Disposal Plan and Construction Waste Disposal Plan agreed with the MoEPA and Local Government;
 - Prepare and update a Construction Schedule.

IV. ANTICIPATED ENVIRONMENTAL IMPACTS OF PROJECTS

139. While there would be numerous positive benefits in terms of improving quality of life of people as well as raising standards of both individual and public health, the subprojects implemented under the Investment Program may also induce certain negative impacts. It is therefore required that environmental impacts are identified and assessed as part of the planning and design process, and that action is taken to reduce those impacts to acceptable levels. This is done through the environmental assessment process, which is an integral part of ADB's lending operations and project development and implementation process.
140. ADB Environmental Safeguard: A Good Practice Sourcebook (December 2012), prescribes that an environmental assessment should evaluate impacts due to the location, design, construction and operation of the project. Construction and operation are the two activities in which the project interacts physically with the environment, so they are the two activities during which the environmental impacts occur. In many projects there are certain effects that, although they will occur during either the construction or operation stage, should be considered as impacts primarily due to the location or design of the project, as they would not occur if an alternative location or design was chosen.
141. ADB's Rapid Environmental Assessment (REA) Checklists are used to identify impacts, assess their likely significance and suggest how negative impacts may be mitigated. The checklists comprise a series of questions regarding the location and potential impacts of a project, which are derived from ADB experience in implementing projects in the sector. Impacts are identified and assessed in the responses to each question.
142. Rapid Environmental Assessment (REA) checklists help to determine the project environmental category, present anticipated environmental impacts and broad mitigation measures of the Investment Program subprojects. Most impacts will result from considerable construction activities in urban and heavily populated areas. Almost all of the design impacts can generally be mitigated while there can be significant impacts if the components are located in environmentally sensitive areas. Therefore, it is important that the Investment Program avoids encroachment into such sensitive areas.
143. The checklists indicate that the most of the environmental, occupational health and safety and social risks occur during the construction stage, which is as expected as these are major construction projects, conducted in heavily populated urban areas, often in locations where there are already traffic and transportation problems.
144. Some temporary impacts associated with pre-construction, construction and Operation works will occur. To deal with those impacts mitigation is proposed as necessary and described below (see table 20).

➤ **Phase 1: Pre-Construction activities**

- The potential environmental effects of the pre-construction activities, such as contractor office set ups, necessary equipment stacks, sites preparation, and the adequacy of the accesses have been considered and all these activities will not deteriorate the existing conditions of the environment.
- Number of pre-construction surveys, including noise and vibration, soil contamination and air pollution will be carried out by contractor prior to the commencement of construction works.

➤ **Phase 2: Construction works**

- Environmental effects likely to occur during the construction of the Project are noise, vibration, dust, solid and liquid wastes, Pollution of surface water during construction and rehabilitation works, impacts on archaeological and CH Sites, flora and fauna, infrastructure and transport, landscape visual change, risks and hazards of work

➤ **Phase 3: Operation**

- Possible environmental effects during operational phase arise from maintenance of arranged infrastructure and will be related to generation of solid wastes and wastewater, emissions, Noise, Vibration and etc.

145. Most construction impacts are however temporary, related to the construction process itself, and can be mitigated by relatively straightforward measures that are common practice at sites of urban construction. These include:

- Reducing dust by using wheel washes, watering site roads and covering loose material when carried on trucks (including removal of waste soil and delivery of sand);
- Reducing noise, dust and visual intrusion by retention of existing mature trees erecting barrier fences around sites and sensitively timing the works;
- Preparing and implementing pollution prevention and abatement plans to reduce risks of accidental spills of toxic materials and to contain and treat any spills that do occur;
- Preparing and implementing traffic management plans to avoid exacerbating congestion problems and maintain vehicle and pedestrian safety in the vicinity of sites; etc.
- Preparing waste management plan ensuring proper management of produced waste-avoid any access to drainage water, immediate removal from the working sites, placement of the waste in secondary protective basins, transferring produced waste only to a certified contractor.

146. Construction impacts that are related to other projects of the Program, which also may require site-specific mitigation measures include:

- Amending designs where necessary to retain as many of the existing mature roadside trees as possible, because of their ecological and aesthetic value;
- Reducing waste disposal by re-using excavated material where possible and planning routes to disposal sites to limit disturbance to road-side residents;
- Careful site selection and design to avoid or minimize the acquisition of privately-owned land, demolition of occupied buildings and relocation of households and businesses.

147. Once the schemes are operating, they should all have beneficial environmental and social impacts by improving particular elements of the transportation system of the city, and thus contributing to overall reductions in: travel times; traffic congestion; economic losses; exposure to noise and exhaust gases, etc. There may also be certain negative impacts, which will need to be reduced by action in the design and procedures for operation of the facilities. These include:

- Increased noise and vibration from new roads and metro lines, so routes will need to avoid susceptible buildings, historical locations and other sensitive areas (e.g. schools, hospitals);
- Increased numbers of pedestrians at transportation hubs, so designs should include safety features such as aerial walkways, subways, roadside barriers and effective signage;

148. It should be noted that in cases where roads are being resurfaced and improved, impacts may actually be positive. Where roads are resurfaced for example, during operation noise will be reduced, driving will be more efficient and car damage as well as risk of accident will also be reduced.

Table 14. Brief description of anticipated site-specific impacts related to the phases of the project

#	Pre-Construction Phase. Potential Impacts	Risk	Sites
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1.	Loss of Topsoil	Moderate Risk	project area
	Construction Phase. Potential Impacts	Risk	Sites
1	Dust, noise, vibration	Moderate Risk	Within project area Operation and movement of construction machinery on
2	Pollution of surface water during construction and rehabilitation works	Minimal Risk	Within project area
3	Impacts on Archaeological and CH Sites	Minimal Risk	Within project area
4	Flora and Fauna	Minimal Risk	Within the project area
5	Infrastructure and Transport	Moderate Risk	Within the project area
6	Waste	Moderate Risk	During construction works within the project area
7	OHS / Community Health and Safety	Moderate Risk	During construction works within the project area (
8	Emergencies	Moderate Risk	During construction works within the project area
9	Landscape visual change	Moderate Risk	During construction works within the project area
	Operation stage Potential Impacts		
1	Risk related to the waste and wastewater pollution	Minimal	Project area
2	Emissions	Minimal	Project area
3	Noise and Vibration	Minimal	Project area

V. ENVIRONMENTAL ASSESSMENT FOR SUBPROJECTS OF THE PROGRAM

149. The EARF was developed to provide guidance on screening and categorization, assessment, planning, institutional arrangements, and processes to be followed.
150. It is not excluded that during implementation of construction works, some adverse environmental and social impacts have to be considered in the project area. While there would be numerous positive benefits in terms of improving quality of life of people as well as raising standards of both individual and public health, the subprojects implemented under the Investment Program may also induce certain negative impacts. It is therefore required that environmental impacts are identified and assessed as part of the planning and design process, and that action is taken to reduce those impacts to acceptable levels. This is done through the environmental assessment process, which is an integral part of ADB's lending operations and project development and implementation process.

A. Environmental Assessment Procedure

151. Subprojects prepared for investment under the Investment Program must comply with Georgia national legislation and ADB SPS 2009. If the environmental criteria are followed in the selection and development of subprojects, then most should have relatively minor environmental impacts, and the procedure for environmental assessment should then be straightforward.
152. The principal steps in each process are described below.
153. Environmental criteria for subproject/component selection. The avoidance of negative impacts (by sensitive site selection, amending features of the design, etc) is a key facet of environmental assessment, as it both protects the environment and can save considerable time, effort and cost downstream in a project, by avoiding the need for difficult and costly environmental mitigation and compensation measures. It is important therefore that environmental impacts are taken into account throughout the development of projects/ subprojects, beginning in the earliest stages and that the decisions are made on the basis of environmental criteria, as well as feasibility and cost. The following guidelines or criteria are formulated, such that if they are taken into account in selecting and developing subprojects, it should reduce their environmental impacts. These are presented in Table 21 below:

Table 15: Environmental Criteria for project selection

A. Exclusion Criteria
<i>A1. All Projects</i>
Following projects <u>cannot</u> be implemented under the Program: <ul style="list-style-type: none">• Projects likely to breach (non-conformity with) the national legislation in general, and particularly the environmental Laws including norms, guidelines, standards, etc. during the project life cycle (design, construction and operation)• Projects located in notified Protected Areas (Strict Nature Reserves, National Parks, Managed Nature Reserves, Natural Monuments and Protected Landscapes)• Projects leading or likely to lead to any damage/loss to cultural heritage sites of national/international importance• Projects with irreversible impacts which cannot be mitigated to acceptable levels• Projects involving water abstraction/wastewater disposal into water bodies/rivers that are in any international dispute• Projects involving activities listed in the ADB's Prohibited Investment Activities List
B. Avoidance or Minimization Criteria
<i>B1. All Projects</i>

Following guidelines and selection criteria shall be followed in implementation of projects to avoid/minimize likely impacts:

- Avoid private land acquisition and involuntary resettlement by using government land and/or taking all possible measures in design and selection of site or alignment
 - If unavoidable, minimize the impacts by reducing the land requirement through alternative design or technology, or select site with less affected persons and where impacts will be less significant
- Avoid cutting of trees by appropriate site selection and best site layout design;
 - If unavoidable, select site with less tree cover and without mature trees
- Consult the Ministry of Education, Science, Culture and Sport of Georgia, when the project is located near places of historical significance to ensure that the project sites are located where there is a low risk of chance finds.

154. **Screening and Categorization.** All ADB funded projects are screened at initial stages of preparation and categorized according to significance of the project's potential environmental impacts. Environmental screening will be performed for all potential subprojects, using the REA checklists, by MDF and verified by ADB. On the basis of the screening, Projects are assigned to one of the following three categories according to the categorization given in ADB SPS 2009:

Category A - A proposed project is classified as category A if it is likely to have significant adverse environmental impacts that are irreversible, diverse, or unprecedented. These impacts may affect an area larger than the sites or facilities subject to physical works. An environmental impact assessment is required.

Category B – A proposed project is classified as category B if its potential adverse environmental impacts are less adverse than those of category A projects. These impacts are site-specific, few if any of them are irreversible, and in most cases mitigation measures can be designed more readily than for category A projects. An initial environmental examination is required

Category C – A proposed project is classified as Category C if it is likely to have minimal or no adverse environmental impacts. No environmental assessment is required although environmental implications need to be reviewed.

134. Based on preliminary screening and categorization of the potential subprojects and considering type, location, scale, and sensitivity and the magnitude of their potential environmental impacts, (including direct, indirect, induced, and cumulative ones) it is expected that the project will trigger Category B for environment at the most. Therefore, IEEs need to be prepared.

B. Preparation of Initial Environmental Examinations (IEE)

135. For Category B projects an IEE has to be prepared in accordance with the requirements of ADB SPS 2009. The IEE is a part of the Feasibility Study and the environmental assessment team has worked closely with the technical planning and design group to ensure that environmental considerations are integrated into the project design. Outline of the EIA and/or IEE Report is provided in Annex 2.

136. For Category B projects the Draft IEE reports for all subprojects will be developed based on ADB Outline and reviewed by ADB's Operational Department. After addressing their comments, if any, the EA then officially will submit the IEE reports to ADB.

137. IEE reports for sub-projects will be developed with support of EC. REA checklist will be used for identification of main environmental problems. The IEE included brief information on activities for each town will be envisaged under the subprojects. Following IEE procedure, the possible impacts will be identified.

138. Generally, an IEE relies on the collection of existing data in order to describe environmental conditions in the project area, and it is not expected that major surveys would be conducted. The work thus involves the collection and analysis of data on the existing environment and the

proposed project, limited field surveys to establish baseline environmental quality, assessment and mitigation of impacts, preparation of the EMP and budget, public consultation, and preparation of the IEE report. Other expenses are the cost of public consultation and document disclosure.

Table 16. Main items for preparation of EMP

Items	Responsible Organization	Funding
Mitigation measures	Construction Contractor	ADB Loan
Monitoring	Construction Company	ADB Loan
Supervision Monitoring	Supervision Consultant	ADB Loan
MDF	Environmental Specialist	ADB Loan
Preparation of EMP	MDF	ADB Loan
Identify anticipated significant adverse environmental impacts and risks	MDF	ADB Loan
Capacity building	MDF	ADB Loan

C. Preparation of Environmental Management Plan (EMP)

139. An IEE study deals with the same issues as an EIA (see below), but is narrower in scope and the issues may be covered in lesser detail. An IEE examines the project's potential negative and positive impacts and recommends measures needed to prevent, minimize, mitigate or compensate for adverse impacts and improve environmental performance. As mitigation is relatively straightforward, the IEE may not require a comprehensive analysis of project alternatives or as detailed an Environmental Management Plan (EMP) as an EIA, and may involve lesser extent of public consultation. For each subproject, an EMP will be developed and for any serious negative impact, corresponding preventing or mitigating measures will be offered. IEEs and EMPs will be developed by the Consultant and approved by ADB. IEEs, including EMPs will be included in the Bidding documents.

VI. CONSULTATION, DISCLOSURE AND GRIEVANCE REDRESS

A. Consultation & Disclosure

140. It is one of the main principles of ADB SPS, 2009 to carry out meaningful consultation with affected people and facilitate their informed participation. It defines meaningful consultation as “a process that (i) begins early in the project preparation stage and is carried out on an on-going basis throughout the project cycle; (ii) provides timely disclosure of relevant and adequate information that is understandable and readily accessible to affected people; (iii) is undertaken in an atmosphere free of intimidation or coercion; (iv) is gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and (v) enables the incorporation of all relevant views of affected people and other stakeholders into decision making, such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues”. Consultation shall be conducted as follows:
- (i) For category B projects at least one consultation shall be conducted, when the draft IEE has been prepared, with the aim of informing stakeholders about the project, its potential impacts and likely mitigation.
141. Relevant project documents will be disclosed to the public based on ADB requirements:
- (i) For Category B projects, the draft and final IEE reports will be posted on MDF and ADB websites, and hard copies will be available for consultation at the MDF office and the Town Hall of the respective project towns.
142. Prior commencement of the construction activates the consultations with key stakeholders will be conducted through organizing personal meetings. Following SPS General Requirements pp. 53–54, public consultation meetings will be conducted and the information will be disclosed in due manner.
143. If COVID 19 circumstances and restrictions prevail, the following procedures will be applied.
144. As social distancing has been applied amongst the population and public consultations in the course of infrastructural projects implementation may become the source of virus spreading. Therefore, it is essential the alternative sources of communication with the stakeholders to be found out in order the recommendations issued by the World Health Organization (WHO) and the Government of Georgia (GoG) not to be violated. It is of high importance also the public and direct consultations with all stakeholders to be held in order the stakeholders and other locals, residing at the Municipality to be thoroughly informed of current and planned infrastructural projects and social and environmental matters related to the referenced projects. IEE report will be disclosed on the MDF website.
145. In case of restriction and requirements of social distancing, due to COVID 19, all these stakeholders will be contacted using distant communication channels (via personal computer, mobile phone). There will be developed the list to reflect the communication means of population in order internet connection availability to be identified.
146. The phone communication will identify also those who have no means of communication, except for the phone.
147. For more people to be involved in public consultation, information booklets reflecting detailed information about the forthcoming consultation meetings will be placed at the sites of groceries, pharmacies, shops, bus stops, public gathering places, city halls and so on.
148. Special attention will be paid to vulnerable group and dedicated discussions will be provided to them.
149. For each safeguard documents the Minutes of Meeting (MoMs) will be developed, reflecting the information provided, asked questions and responses, and other information.
150. In case of state of emergency due to COVID-19 pandemic will be abolished before the starting

of the construction activates the consultations with key stakeholders will be conducted through organizing personal meetings. Following SPS General Requirements pp. 53–54, public consultation meetings will be conducted and the information will be disclosed in due manner.

151. Environmental monitoring reports³ will be prepared during the project implementation. All documents provided locally will be developed in Georgian. It should be noted, that such reports will be developed in English as well.
152. MDF has the overall responsibility for the project implementation and environmental compliance. The administrative bodies responsible for environmental protection are the MoEPA and the respective municipality. All efforts will be made to avoid dissatisfaction by stakeholders (in particular, persons affected directly by the project), through effective consultation and disclosure as described above, and by responding promptly and appropriately to stakeholder concerns. The stakeholders may still wish to raise concerns and complaints about the project's environmental performance.
153. Since the work is being done in an urban area, most of the impacts are construction- related, therefore it is anticipated that improper or inadequate implementation of EMP may lead to disturbance and inconvenience to local people during construction.

B. Grievance Redress Mechanism

Objectives

154. In projects implemented by MDF, grievance resolution is viewed as a two-stage process. The first stage involves locally available means, such as discussing the concern with Deputy Resident Engineer or Contractor, on site focal point from Supervision Consultant / Contractor, or/and writing to local municipality for resolution of grievances on the spot. The grievance redress mechanism shall deal with the issues of e.g. amount of compensation, loss of access roads, etc. as well as the losses and damages caused by the construction works, e.g. temporary or permanent occupation of land by the contractor. Therefore, the grievance redress mechanism shall be in place by the time the MDFG starts negotiations with the APs and shall function until the completion of the construction.

Grievance Resolution Process

155. Grievance redress procedures of Stage 1 are an informal tool of dispute resolution allowing the APs and the project implementation team to resolve the disagreement without any formal procedures, procrastination and impediments. The international experience of resettlement shows that such informal grievance redress mechanism helps to solve most of the complaints without formal procedures (i.e. without using the procedures specified in the Administrative Code or litigation). This mechanism enables unimpeded implementation of the Project and timely satisfaction of complaints. If the AP is not satisfied, the grievance redress mechanism should assist them in lodging an official complaint in accordance with the procedures of Stage 2 (the plaintiff should be informed of his/her rights and obligations, rules and procedures of making a complaint, format of complaint, terms of complaint submission, etc.).
156. Stage 2 – review of AP's complaint. Grievance Redress Committee (GRC) for the whole period of the project implementation. GRC shall review the written complaints of APs, which were not satisfied at Stage 1. At stage 2 the AP's complaint shall be resolved and GRC shall make a decision in compliance with the Administrative Code of Georgia.

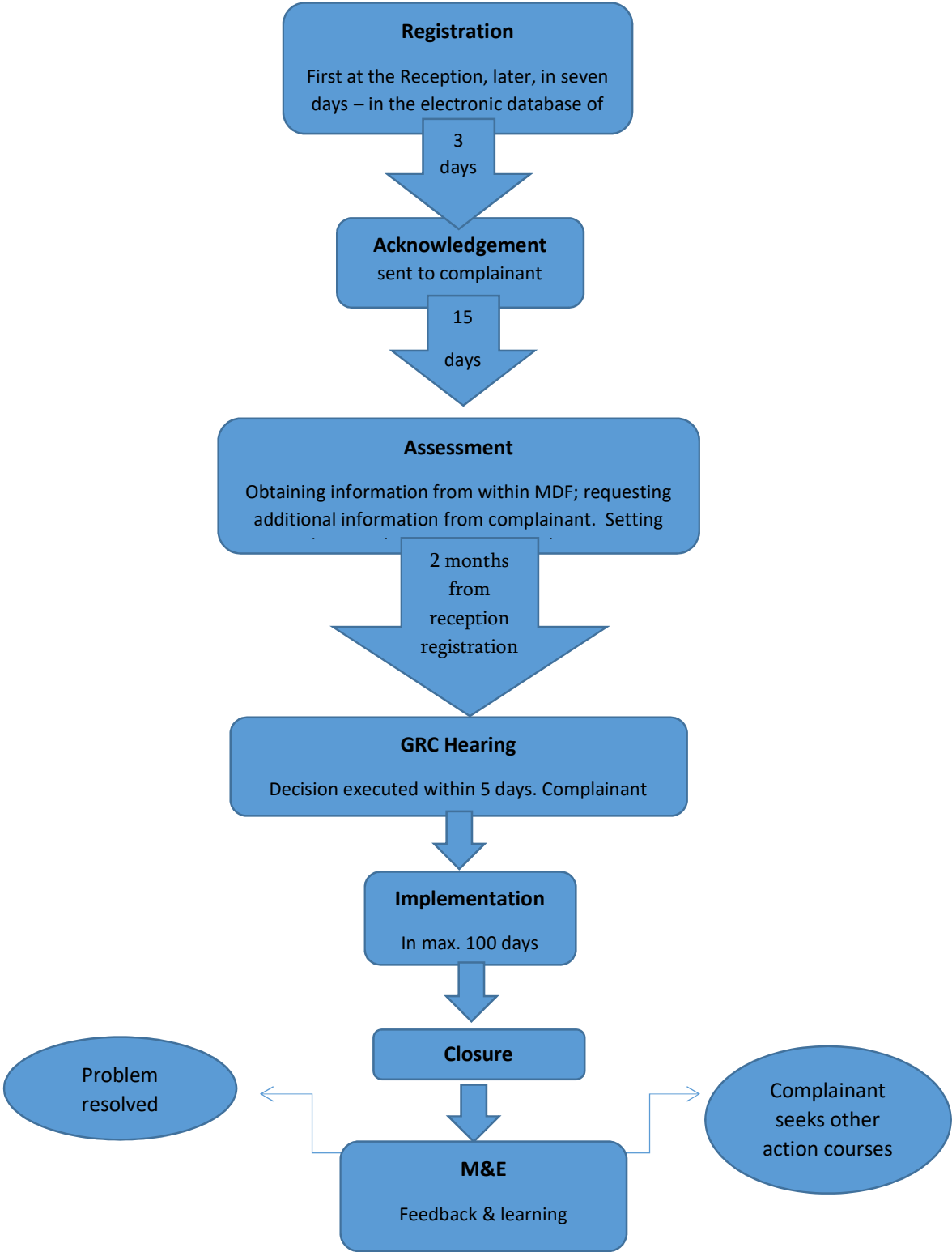
³ <https://www.adb.org/projects/43405-025/main#project-documents>

157. The present Procedures are developed specifically for the purposes of Stage 2 process of grievance resolution by the GRC. The purpose of these GRC Procedures is to make MDF more accessible to project affected communities and to help ensure efficient resolution of project-related complaints.
158. Upon receipt of the complaint it will be registered at the reception of MDF. The complainant shall be given a receipt evidencing submission of his/her complaint with the MDF. The receptionist will direct the complaint to the Director of MDF, who shall screen all incoming claims and within 5 working days of receipt of such claim by the reception office, direct the appropriate claims to the Safeguards Unit. Safeguards unit will register the complaint in its electronic database. Upon registration in the database the complaint will be assigned a number.
159. After registration of the complaint in the database of Safeguards Unit, the Safeguards unit will notify the complainant in writing (letter, and/or email) that the complaint has been received, registered, and forwarded to the project team for action as well as the number assigned to the complaint and the contact information for further queries and clarifications.
160. Within 15 working days of registration of the complaint in the database the Safeguards unit will:
- Determine if additional information and/or documents necessarily need to be provided by the complainant, and if so, request the complainant in writing to submit such additional information/documents.
 - Obtain relevant and necessary information internally, from MDF's various departments or from project partners.
 - Decide on the date when the complaint shall be presented to the GRC for hearing;
 - Inform the complainant of such date, if necessary;
 - Update the status of the complaint in the database.
161. GRC Hearing shall be held at least once a month. Any complaint must be heard within two months after its registration at the MDF reception. The agenda of the GRC hearing, with a list of complaints to be reviewed at that hearing shall be set in advance. Such Agenda, together with a short brief/summary on each complaint shall be sent to each member of the GRC at least 3 working days prior to the date of the GRC hearing.
- The staff member responsible for each complaint shall first present a short description/summary of the complaint, and then answer any questions the GRC members may have. Final decision based on the deliberations and discussions is made by the Committee by the majority of votes. If needed, the complainant may be invited to the hearing to present evidence related to the case. Copy of the minutes from the hearing shall be provided to the relevant IFI.
 - The decision adopted by the committee shall be signed by the Executive Director within 5 working days of such hearing. The final decision shall contain a timeline of its implementation.
 - The information letter (regarding the decision) to the complainant shall be sent in writing within 2 working days after signing of the resolution by the Executive Director. The response provided to complainant(s) should be informative and include relevant details.
 - Safeguards Unit will update the status of the complaint in the database accordingly.
 - MDF's appropriate Unit shall be responsible for the follow up and implementation of the GRC decision in accordance with the resolution. Safeguards unit shall report to each following GRC meeting on the progress and status of implementation of the previous GRC meeting decisions.
 - Implementation time frame will be case specific but should not normally exceed 100 days. GRC secretary will monitor implementation of the actions.
 - When all actions decided at the GRC hearing have been taken the complaint is considered closed. The GRC will inform the complainant that all actions have been taken and the problem has been resolved and closed, and/or that the complaint has been rejected and is closed. If no response is received from the complainant during three weeks, the complaint shall be considered officially closed.

162. If the MDFG decision fails to satisfy the aggrieved APs, they can pursue further action by submitting their case to the appropriate court of law.
163. The complaints and grievances will be addressed through the process described below in figure 2.
164. Complaints will also be accepted by any ADB office such as a resident mission, regional office or representative office, which will forward them unopened to the CRO.

Complaints Receiving Officer, Accountability Mechanism
Asian Development Bank Headquarters
6 ADB Avenue, Mandaluyong City 1550, Philippines
Email: amcro@adb.org, Fax +63-2-636-2086

Figure 2. Grievance Redress Mechanism

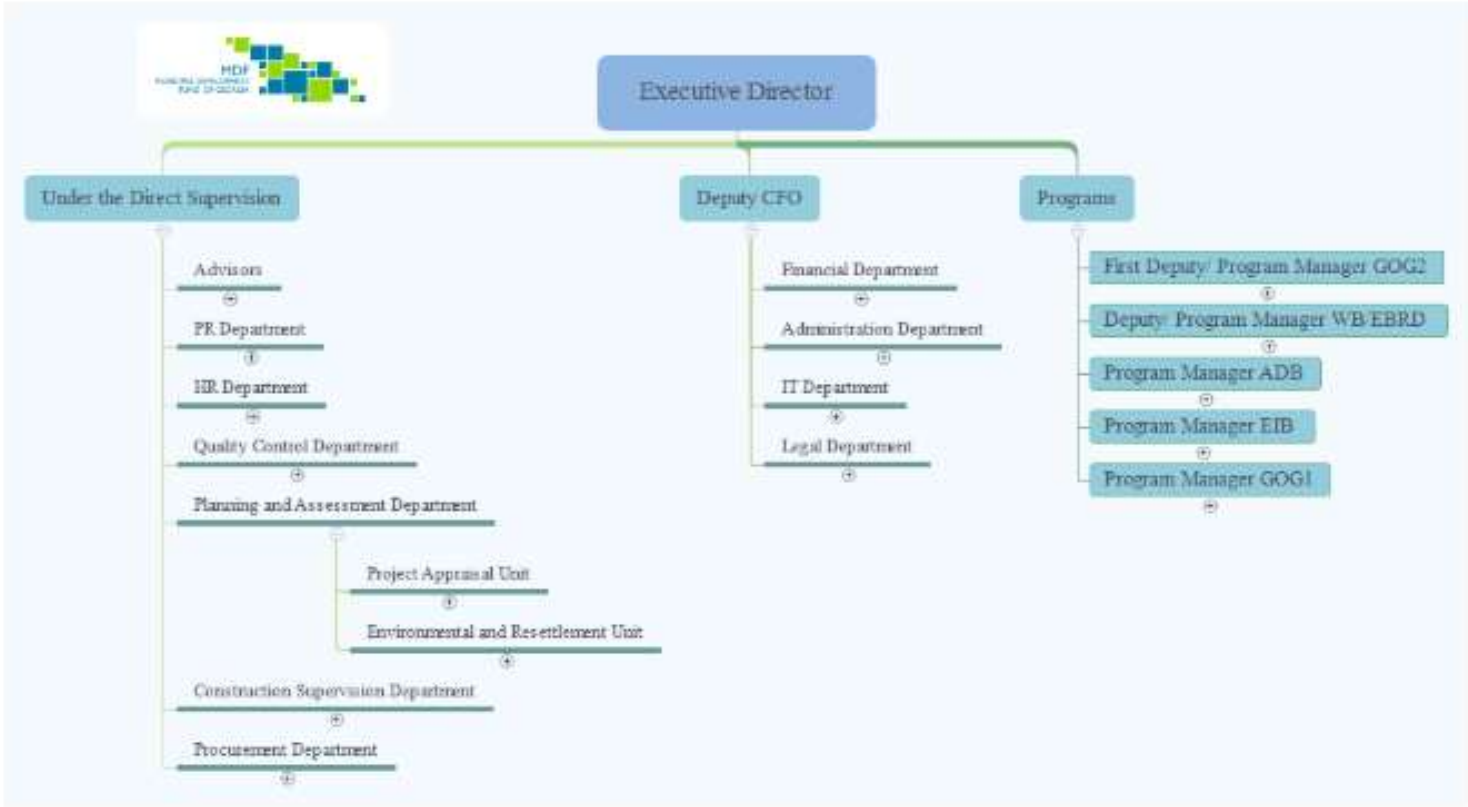


VII. MONITORING AND REPORTING

165. MDF monitor the performance of consultants conducting the EIA and IEE studies during feasibility study and detailed design stages. MDF will then submit draft EIA and IEE reports of subprojects to ADB for review and will ensure that the consultants address all comments in producing final versions:
- IEE Reports
 - All updated or revised IEEs of subprojects.
166. MDF will also submit EIA and IEE reports and environmental permit applications to MoEPA when required by Georgian law.
167. MDF will monitor EMP implementation (mainly by contractors) when the subprojects are constructed. The status of implementation and outcome of monitoring will be submitted to ADB regularly through biannual Environmental Monitoring Reports (EMR).
168. Review and update of EARF. EARF shall be reviewed and updated to ensure consistency with the country legal framework and ADB's safeguards policies, as amended from time to time. As the Investment Program progresses, this periodic revision or update shall also reflect lessons learnt from the subproject implementation and if required the subproject selection criteria shall be modified to avoid significance impacts. ADB will review the revised EARF, after which it will be formally adopted by the EA.

ANNEXES:

Annex 1. Organization Chart of MDF



Annex 2. Outline of an EIA and/or IEE Report

A. Executive Summary

1. This section describes concisely the critical facts, significant findings, and recommended actions.

B. Policy, Legal, and Administrative Framework

2. This section discusses the national and local legal and institutional framework within which the environmental assessment is carried out. It also identifies project-relevant international environmental agreements to which the country is a party.

C. Description of the Project

3. This section describes the proposed project; its major components; and its geographic, ecological, social, and temporal context, including any associated facility required by and for the project (for example, access roads, power plants, water supply, quarries and borrow pits, and spoil disposal). It normally includes drawings and maps showing the project's layout and components, the project site, and the project's area of influence.

D. Description of the Environment (Baseline Data)

4. This section describes relevant physical, biological, and socioeconomic conditions within the study area. It also looks at current and proposed development activities within the project's area of influence, including those not directly connected to the project. It indicates the accuracy, reliability, and sources of the data.

E. Anticipated Environmental Impacts and Mitigation Measures

5. This section predicts and assesses the project's likely positive and negative direct and indirect impacts to physical, biological, socioeconomic (including occupational health and safety, community health and safety, vulnerable groups and gender issues, and impacts on livelihoods through environmental media and physical cultural resources in the project's area of influence, in quantitative terms to the extent possible; identifies mitigation measures and any residual negative impacts that cannot be mitigated; explores opportunities for enhancement; identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions and specifies topics that do not require further attention; and examines global, transboundary, and cumulative impacts as appropriate.

F. Analysis of Alternatives

6. This section examines alternatives to the proposed project site, technology, design, and operation—including the no project alternative—in terms of their potential environmental impacts; the feasibility of mitigating these impacts; their capital and recurrent costs; their suitability under local conditions; and their institutional, training, and monitoring requirements. It also states the basis for selecting the particular project design proposed and, justifies recommended emission levels and approaches to pollution prevention and abatement.

G. Information Disclosure, Consultation, and Participation

7. This section:
 - (i) describes the process undertaken during project design and preparation for engaging stakeholders, including information disclosure and consultation with affected people and other stakeholders;
 - (ii) summarizes comments and concerns received from affected people and other stakeholders and how these comments have been addressed in project design and mitigation measures, with special attention paid to the needs and concerns of vulnerable groups, including women, the poor, and Indigenous Peoples; and
 - (iii) describes the planned information disclosure measures (including the type of

information to be disseminated and the method of dissemination) and the process for carrying out consultation with affected people and facilitating their participation during project implementation.

H. Grievance Redress Mechanism

- 8. This section describes the grievance redress framework (both informal and formal channels), setting out the time frame and mechanisms for resolving complaints about environmental performance.

I. Environmental Management Plan

- 9. This section deals with the set of mitigation and management measures to be taken during project implementation to avoid, reduce, mitigate, or compensate for adverse environmental impacts (in that order of priority). It may include multiple management plans and actions. It includes the following key components (with the level of detail commensurate with the project’s impacts and risks):

(i) Mitigation:

- (a) identifies and summarizes anticipated significant adverse environmental impacts and risks;
- (b) describes each mitigation measure with technical details, including the type of impact to which it relates and the conditions under which it is required (for instance, continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate; and
- (c) provides links to any other mitigation plans (for example, for involuntary resettlement, Indigenous Peoples, or emergency response) required for the project.

(ii) Monitoring:

- (a) describes monitoring measures with technical details, including parameters to be measured, methods to be used, sampling locations frequency of measurements, detection limits and definition of thresholds that will signal the need for corrective actions; and
- (b) describes monitoring and reporting procedures to ensure early detection of conditions that necessitate particular mitigation measures and document the progress and results of mitigation.

(ii) Implementation arrangements:

- (a) Specifies the implementation schedule showing phasing and coordination with overall project implementation;
- (b) describes institutional or organizational arrangements, namely, who is responsible for carrying out the mitigation and monitoring measures, which may include one or more of the following additional topics to strengthen environmental management capability: technical assistance programs, training programs, procurement of equipment and supplies related to environmental management and monitoring, and organizational changes; and
- (c) Estimates capital and recurrent costs and describes sources of funds for implementing the environmental management plan.
- (iv) Performance indicators: describes the desired outcomes as measurable events to the extent possible, such as performance indicators, targets, or acceptance criteria that can be tracked over defined time periods.

J. Conclusion and Recommendation

- 10. This section provides the conclusions drawn from the assessment and provides recommendations.

Annex 3. Rapid Environmental Assessment form

Instructions:

(i) The project team completes this checklist to support the environmental classification of a project. It is to be attached to the environmental categorization form and submitted to the Environment and Safeguards Division (RSES) for endorsement by Director, RSES and for approval by the Chief Compliance Officer.

(ii) This checklist focuses on environmental issues and concerns. To ensure that social dimensions are adequately considered, refer also to ADB's (a) checklists on involuntary resettlement and Indigenous Peoples; (b) poverty reduction handbook; (c) staff guide to consultation and participation; and (d) gender checklists.

(iii) Answer the questions assuming the “without mitigation” case. The purpose is to identify potential impacts. Use the “remarks” section to discuss any anticipated mitigation measures.

Country/Project Title:

Sector Division:

Screening Questions	Yes	No	Remarks
A. PROJECT SITING IS THE PROJECT AREA ADJACENT TO OR WITHIN ANY OF THE FOLLOWING AREAS:			
▪ UNDERGROUND UTILITIES			
▪ CULTURAL HERITAGE SITE			
▪ PROTECTED AREA			
▪ WETLAND			
▪ MANGROVE			
▪ ESTUARINE			
▪ BUFFER ZONE OF PROTECTED AREA			
▪ SPECIAL AREA FOR PROTECTING BIODIVERSITY			
▪ BAY			
B. POTENTIAL ENVIRONMENTAL IMPACTS WILL THE PROJECT CAUSE...			

Screening Questions	Yes	No	Remarks
▪ Encroachment on historical/cultural areas?			
▪ Encroachment on precious ecology (e.g. sensitive or protected areas)?			
▪ Impacts on the sustainability of associated sanitation and solid waste disposal systems?			
▪ Dislocation or involuntary resettlement of people?			
▪ Disproportionate impacts on the poor, women and children, Indigenous Peoples or other vulnerable groups?			
▪ Accident risks associated with increased vehicular traffic, leading to loss of life?			
▪ Increased noise and air pollution resulting from increased traffic volume?			
▪ Occupational and community health and safety risks?			
▪ Risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during project construction and operation?			
▪ Generation of dust in sensitive areas during construction?			
▪ Requirements for disposal of fill, excavation, and/or spoil materials?			
▪ Noise and vibration due to blasting and other civil works?			
▪ Long-term impacts on groundwater flows as result of needing to drain the project site prior to construction?			
▪ Long-term impacts on local hydrology as a result of building hard surfaces in or near the building?			
▪ Large population influx during project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)?			

Screening Questions	Yes	No	Remarks
▪ Social conflicts if workers from other regions or countries are hired?			
▪ Risks to community safety caused by fire, electric shock, or failure of the buildings safety features during operation?			
▪ Risks to community health and safety caused by management and disposal of waste?			
▪ Community safety risks due to both accidental and natural hazards, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure could result in injury to the community throughout project construction, operation and decommissioning?			

Annex4. Template of semi-annual Environmental Monitoring Report

Introduction

Preamble

- 1. This report represents the Semi - Annual Environmental Monitoring Review (SAEMR) for INSERT PROJECT NAME.
- 2. This report is the (insert number of report, i.e. 1st, 2nd etc) EMR for the project.

Headline Information

- 3. Include a brief summary of significant outcomes of the project construction process and any specific areas of concern of which ADB should be informed.

Project description and current activities

Project Description

- 4. Provide a brief description of the project. – this should not vary from one report to the next.

Project Contracts and Management

- 5. Provide a list or table of main organisations involved in the project and relating to Environmental Safeguards. This should include lender, borrower, PIU, Main Contractor/s and significant sub-contractors, environmental staff of various organisations should be named, and contact details provided.
- 6. Provide a description of how the contracts are being managed and names of key personnel.

Project Activities during Current Reporting Period

- 7. Provide an outline of major activities which have been carried out during the current reporting period. Provide adequate information so the reader can understand what has been taking place on site. Include photographs (with date stamp) of activities where possible and relevant. Place bulk photographs into an annex to the main report or a separate photographic record.
- 8. Where multiple work sites are involved provide information on which work sites have been active during the current reporting period. Provide map of work site areas if relevant.
- 9. Provide details (chart) of worker numbers (maximum, Minimum) in the current reporting period and anticipated changes in staff in following period
- 10. Highlight any significant new activities commenced during the current reporting period.
- 11. For the above make maximum use of charts, images and tables.

Description of Any Changes to Project Design

- 12. Describe any changes to the project design from that which was assessed in the Impact Assessment phase of the project and is set out in the Initial Environmental Examination/Environmental Impact Assessment. If none have taken place, please state – No changes.
- 13. Note if significant changes have occurred the PIU should have already informed ADB of this and made a decision on the need for updates to the EIA/IEE and/or Environmental Management Plans

Description of Any Changes to Agreed Construction methods

- 14. Provide a description and reason for changes to any construction processes, for example, blasting of rock rather than excavation, open channel rather than thrust boring at road crossings.

Environmental Safeguard activities

General Description of Environmental Safeguard Activities

- 15. Please provide a summary of the routine activities undertaken by environmental safeguard staff during the current reporting period. This should include the work undertaken by the contractor’s environmental manager, the Environmental Supervisor and any informal visits by the PIU environmental staff.

Site Audits

- 16. Please provide details (table form preferred) of any **formal** audits undertaken by environmental safeguard process staff during the current reporting period. This would include Contractors Environmental Manager, Environmental Supervisor, PIU Staff and ADB staff during review missions.
- 17. Information required includes:
 - Date of Visit
 - Auditors Name
 - Purpose of Audit
 - Summary of any Significant Findings
 - Cross reference to Audit Report which should be included as an annex.
- 18. Summarise Findings of Audits under taken in the current period, compare with previous periods and identify any trends or common issues.

Issues Tracking (Based on Non-Conformance Notices)

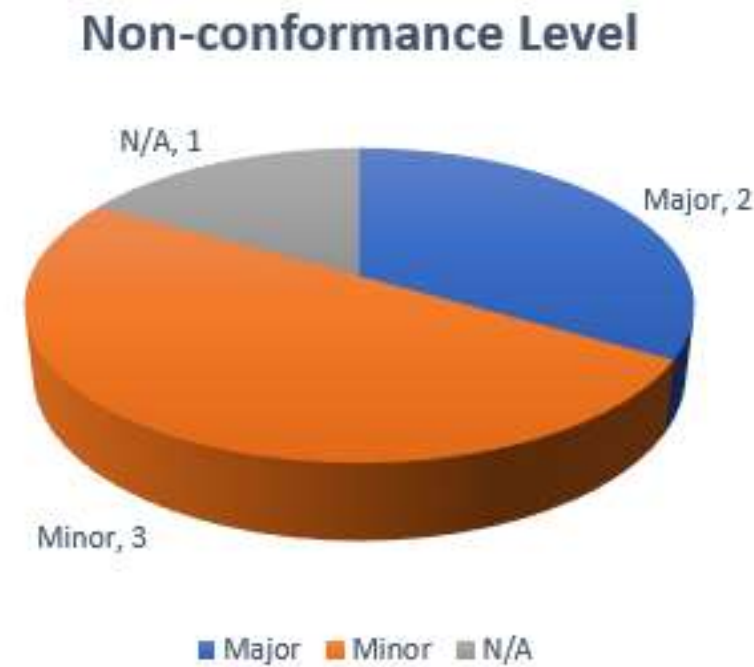
- 19. Provide an overview and description of issues tracked during the current period.

20. Provide commentary on key statistics based on graphs and tables which can be copied from the Environmental Safeguards Issues Tracing Workbook. For example

Table 0-1 Summary of Issues Tracking Activity for Current Period

Summary Table	
Total Number of Issues for Project	6
Number of Open Issues	1
Number of Closed Issues	5
Percentage Closed	17%
Issues Opened This Reporting Period	5
Issues Closed This Reporting Period	4

Figure 0-1 - Summary of Issues by Non-Conformance



21. Use data from workbook as required.

Trends

22. Use information from previous period reports and the current period information to identify trends in issues. For example -

Quarterly Report No	Total No of Issues	% issues Closed	% issues closed late
1	5	87	0
2	18	56	15
3	59	23	26

23. Provide a commentary on the trends, explain why they may be occurring and in the case of negative trends explain what steps have been taken to make corrections.
24. Provide a copy of all NCN's for all environmental major Non-Conformances in an annex. If none state this. (To provide example/sample- Ketil!!!)

Unanticipated Environmental Impacts or Risks

25. Document any unanticipated environmental impacts and risks which have been identified in the current period (as a reminder, these are impacts or risks which were not identified in the Impact Assessment process). State what actions were taken to mitigate the impacts and risks, were these successful.

Results of environmental monitoring

Overview of Monitoring Conducted during Current Period

26. Provide a commentary on what environmental measurements have been undertaken during the current reporting period. Highlight any areas where agreed monitoring has not taken place.
27. Include sub sections for the report on those environmental media which have been measured, for example
 - Noise
 - Air Quality
 - Water Quality
28. The sections should present highlights of the outcomes of the monitoring focussing on a comparison of the results with the agreed standards as set out in the Specific Environmental Management Plan and/or Monitoring Plan.
29. In particular make clear where exceedances in the standards have occurred and provide reasons and actions which have been implemented to correct – refer to relevant NCN as appropriate.
30. Detailed monitoring results should be presented as an annex.

Trends

31. Based on the current and past periods of monitoring identify and discuss any trends which may be developing.

Summary of Monitoring Outcomes

32. Provide any recommendations on the need for additional monitoring, or requests for ceasing/altering monitoring if activities have been completed or monitoring is showing no significant effects over long period.

Material Resources Utilisation

Current Period

33. Provide values (tables, graphs etc) for current reporting period of utilisation of electricity, water and any other materials which have been include in the SEMP for monitoring.

Cumulative Resource Utilisation

34. Provide values (tables, graphs etc) for cumulative resource utilisation of power water etc, for whole project life. Identify trends or significant changes and provide reasons for any such changes.

Waste Management

35. Provide summary of waste management activities during the current period. Provide waste contractors/s names and location of waste sites.

Current Period

36. Provide breakdown using graphs, table etc, of waste streams during current reporting period. This information should include

- Type of Waste (description and classification – e.g. hazardous – non-hazardous;
- Waste Source – what activity generated the waste and where;
- Quantity of waste generated;
- Treatment/disposal route – provide information on quantities of waste reused, recycled and sent to landfill or incineration; and
- Final disposal sites for waste.

37. Provide commentary on results.

Cumulative Waste Generation

38. Using the above bullet points for waste develop cumulative waste generation results.

39. Discuss trends and provide suggestions for waste reduction, increase in reuse and recycling if possible.

Health and Safety

Community Health and Safety

40. Provide information on any incidents which have occurred during the reporting period which resulted in or could have resulted in Community Health and Safety issues. Include within this section traffic accidents.

Worker Safety and Health

41. Provide detailed statistics on accident rates, including Lost Time Incidents, Accidents and near misses.

42. Provide information on safety campaigns conducted during the reporting period.

Training

43. Provide information on all environmental safeguard related training activities undertaken in this period and cumulatively for project life to date. These may include specific training of environmental staff, HSE inductions of site workers etc.
44. Discuss the need for additional training and what training is planned for coming quarter.

Functioning of the SEMP

SEMP Review

45. Provide a commentary on the SEMP in terms of the ability of the contractor to implement fully the requirements set out. Highlight any areas where the contractor has not been able to implement mitigation or monitoring measures.
46. Is the SEMP effective, are mitigation measures set out still appropriate and are they working as intended – do they need changing?
47. Are there better alternative mitigation measures?
48. Can some mitigation measures be reduced or removed as the specific risk identified in the IEE/EIA and/or SEMP has not materialised?
49. Provide a table of requests for changes to the current mitigation measures for consideration by ADB. Note you can send these at any time during the project, there is no need to wait until the quarterly reporting period to be completed. If PIU has supplied requests to ADB, these should be listed along with ADB response. Where changes (additions/deletions and modifications) of mitigation or monitoring measures have been approved, the PIU shall ensure that the SEMP is updated to reflect these changes.

Good practice and opportunity for improvement

Good Practice

50. Provide an overview with charts, images etc of examples of continuing good practice for the project. State why these have been implemented and how they are reducing environmental impacts or risks.

Opportunities for Improvement

51. Identify any areas which may be outside of the formal NCN process, but which changes to construction techniques, mitigation etc would result in an improvement in environmental, health and safety performance of the project.

Summary and recommendations

Summary

52. Provide a summary of the effective implementation of Environmental Safeguards during the reporting period and for the overall project construction period to date.

Recommendations

53. Provide any recommendations for consideration by the ADB for changes to the Environmental Safeguarding process for the project.