



MUNICIPAL DEVELOPMENT FUND OF GEORGIA  
საქართველოს მუნიციპალური განვითარების ფონდი

# **ENVIRONMENTAL MANAGEMENT FRAMEWORK**

## **Sustainable Wastewater Management Project**

**May 8, 2013**

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## ***ABBREVIATIONS***

|      |                                                      |
|------|------------------------------------------------------|
| EIA  | Environmental Impact Assessment                      |
| EMF  | Environmental Management Framework                   |
| EMP  | Environmental Management Plan                        |
| ESSU | Environmental and Social Safeguards Unit             |
| IBRD | International Bank of Reconstruction and Development |
| IDA  | International Development Association                |
| LSG  | Local Self Government                                |
| MDF  | Municipal Development Fund of Georgia                |
| MRDI | Ministry of Regional development and Infrastructure  |
| NGO  | Non-Governmental Organization                        |
| OM   | Operations Manual                                    |
| OP   | Operational Policy                                   |
| RAP  | Resettlement Action Plan                             |
| RPF  | Resettlement Policy Framework                        |
| SIDA | Swedish International Development Cooperation Agency |
| SWMP | Sustainable Wastewater Management Project            |
| UWSC | United Water Supply Company                          |
| WB   | World Bank                                           |

## **1. Preface**

Present Environmental Management Framework (EMF) is an integral part of the Operations Manual of the Municipal Development Fund of Georgia (MDF) prepared for the purposes of implementing Sustainable Wastewater Management Project (SWMP) in compliance with the national policies and regulations as well as with the safeguard policies of the World Bank. The World Bank acts as an administrator of grant proceeds provided by Sweden from the Programmatic Trust Fund through the Swedish International Development Cooperation Agency (SIDA).

EMF covers environmental, cultural, and social aspects of project management. EMF refers to the possibility of involuntary resettlement in the course of the project implementation. Mechanisms of handling involuntary resettlement are not covered by this EMF, though, because MDF has a self standing Resettlement Policy Framework (RPF), which provides guidance for identifying in what circumstances does the resettlement policy apply, as well as for developing and implementing Resettlement Action Plans.

## **2. Project Context**

Many years of decline in the quality, coverage and maintenance of basic urban services, such as water supply, sewerage, local roads and solid waste services, had reduced quality of life and constrained private sector growth through the early years of the current decade. For services such as water supply and sanitation, the legacy of Soviet era led to inefficient service use and extensive subsidies. The situation started to improve since 2003, following Georgia's peaceful Rose Revolution, but water and sanitation infrastructure is still in need of substantial rehabilitation in much of the country.

Wastewater service in Georgia is often obstructed by inadequate levels of sanitary services and dilapidated (or entire lack of) infrastructure. Most settlements lack hygienic facilities to dispose of wastewater, regardless of whether via "decentralised" (on premises facility) or "centralised" (sewer collection network to a waste water treatment plant) type facility. This affects quality-of-life, public health, economic vitality (especially where tourism is important) and environmental quality in communities across Georgia. About 35% of Georgia population is served via sewage collection networks in about 45 urban centres; the pipes are typically decades old and in poor condition. At most 5 of 29 waste water treatment plants (WWTPs) have marginal functionality – with physical treatment only (with the exception of one new WWTP); therefore, numerous sewer networks collect and concentrate wastewater, but release it untreated, thus polluting waterways. Investment capital from national sources to repair, replace or build new infrastructure has been scarce since the country's independence.

Georgia, with support from the World Bank under the IDA-financed Municipal & Regional Infrastructure Development Project, has drafted a Wastewater Management Strategy and feasibility studies for wastewater treatment in six selected cities and towns. The Bank also finances a regional development program in Georgia using an integrated approach to boost economic development (Regional Development Project focusing on Kakheti region - RDP and Regional Development Project II focusing on Imereti region - RDP II). Both projects aim to improve infrastructure services and institutional capacity to support increased contribution of tourism in the local economy of both regions. They provide both - infrastructure investments and technical assistance.

SWMP will complement these projects through (a) enhancing the institutional and technical capacity in Georgia for sustainable wastewater management; and (b) providing parallel financing for piloting

rehabilitation of 2-3 cost-effective WWTPs in the target regions of the program, i.e. Imereti and Kakheti. These will ensure implementation of tourism development measures that are sustainable and conducive to the environment.

The project is expected to be implemented in 2013-2015.

### **3. Project Objectives and Description**

The objective of SWMP is to promote sustainable wastewater management in Georgia and pilot implementation of wastewater treatment plants, aligned with World Bank safeguards policies and in harmonization with the EU legislation.

The Project encompasses environmental, social and economic components and will focus on an integrated approach to improved wastewater management. SWMP will, together with interventions by the Government of Georgia, municipalities in Georgia, bilateral donors and international financing institutions, contribute to an overall improvement of the efficiency of the water and wastewater sector.

The Project consists of the following parts:

#### **Part I: Technical Assistance**

- (a) Provision of technical assistance to support the Government of Georgia in developing a conducive policy environment for wastewater treatment infrastructure;
- (b) Carrying out of on-the-job training in wastewater operation and maintenance, including sludge management, disposal and reuse of resources;
- (c) Carrying out of: (i) training on wastewater management, including affordability, sustainability and cost recovery; and (ii) study tours to learn about good practice of different sustainable wastewater technologies;
- (d) Development of a policy for sludge management, including final disposal;
- (e) Support public participation through the carrying out of stakeholder consultation workshops focused on wastewater management;
- (f) Preparation of feasibility studies, engineering designs, construction supervision, monitoring and evaluation activities and provision of technical assistance to the Project Implementing Entity and the United Water Supply Company (UWSC).

#### **Part II: Investment Grants**

Improvement of the efficiency of the water and wastewater sector through rehabilitation of approximately two to three wastewater treatment plants to be financed from the proceeds of the Investment Subproject Grants.

Key results expected from the implementation of SWMP are (i) increased institutional and technical capacity for wastewater management, (ii) increased proportion of urban population that has access to sustainable wastewater services, and (iii) decreased discharges of untreated wastewater to receiving water bodies.

#### Total Project Cost

The estimated total project cost (subject to preparation and appraisal), including physical and price contingencies, is in an amount not to exceed nine million nine hundred thirty five thousands and eighty eight United States Dollars (U.S.\$9,935,088).

#### **4. Criteria of Selection and Eligibility of Subprojects under SWMP**

Investment grants provided under SWMP should be used to promote important transition objectives such as cost control, cost recovery and effective demand side management, in the context of affordability constraints. They should be carefully assessed on economic, financial and safeguards perspectives and least cost solutions should be promoted. Beneficiary municipalities will be chosen for their potential for achieving quantifiable and measurable environmental improvements and reforms towards sustainable services based on cost recovery. In this respect size of municipality, capacity of the overall and local branch of UWSC, reform orientation, affordability and additionality of support will be assessed.

Only municipalities that make commitment for investing in wastewater treatment (i.e. have allocated land, prepared documentation, WWTP is part of their investments priority plan), but due to funding limits are unable to realise their plans, will be eligible for investment grant support. Priority will be given to cases where the environmental benefit will be greater. As a rule, investment grants should be committed where requirements for improved cost recovery (for Operation and Maintenance costs, depreciation of assets as well as for new investments) are supported by the local authority. An important criterion is selection is advancement in the preparation process, and the policy applied will be first-come, first-served.

Market development shall not be undermined by the indiscriminate use of grants. Therefore grants should be subject to criteria of economic efficiency. Investment grants must not be used to undercut private funding, nor reduce incentives for reforms or development of private financing solutions. For the purpose of using the Investment grant component, the Bank enters into a grant agreement with the Beneficiary.

The investment grant component must be blended with other funding for the investment, being either national/local/private/IFI sources. The Bank provides parallel loan/credit shares in the proposed projects for water supply and sewerage network. The Government of Georgia and the municipalities shall co-finance the investments. The investment grant component from Sweden for an individual project should be as limited as possible but still enabling the implementation of the project.

#### **5. Governance Structure**

The World Bank manages and administers the Trust Fund provided for financing of SWMP, and provides monitoring and supervision of recipient executed activities. Activities to be financed with the resources of the Trust Fund are subject to prior approval of Sweden as per the following:

(1) For activities in respect of the Technical Assistance Component, MDF in consultation with UWSC will submit a work plan to the Bank. The Bank will appraise and submit to SIDA a proposal in the form of a project fiche together with an indicative budget and a result framework. Each proposal shall be submitted to SIDA for its written approval prior to starting the bidding process by MDF.

(2) For activities in respect of the Investment Grant Component, MDF in consultation with UWSC will submit a work plan to the Bank. The World Bank shall appraise and submit to SIDA a proposal in the form of a Subproject Appraisal Report (SAR), including a result framework, an indicative budget and a Checklist for Assessment of Individual Projects; the form of which is to follow the MDF's Operations Manual for the Trust Fund. Each proposal shall be submitted to SIDA for its written approval prior to starting the bidding process by MDF.

## **6. Introduction to the Environmental Management Framework**

This EMF is a technical day-to-day guide for implementing the project in the environmentally and socially responsible manner. It provides guidance for screening subproject proposals for the risks of deteriorating natural environment, damaging cultural heritage, resulting in negative social impacts, and affecting international waterways. Screening outcomes are used for confirming that a proposed subproject falls under environmental Category B and can be supported by SWMP if it meets other criteria of selection too. EMF carries further instructions on the format of environmental and social assessment of subproject proposals and for planning mitigation measures.

## **7. Environmental Compliance of the Project**

SWMP must be implemented in full compliance with the national legislation, including laws, regulations, and standards governing environmental management, social protection, and preservation of cultural heritage of the country. As far as the World Bank is an administrative agency of grant funds provided by SIDA for the project implementation, the safeguard policies of the World Bank also apply.

SWMP triggers the following safeguard policies of the World Bank:

- OP/BP 4.01 Environmental Assessment
- OP/BP 4.11 Physical Cultural Resources
- OP/BP 4.12 Involuntary Resettlement
- OP/BP 7.50 Projects on International Waterways

The project carries investment components in support to infrastructure development and therefore triggers OP/BP 4.01 Environmental Assessment. Based on the principles of the OP/BP 4.01, the SWMP is classified as environmental Category B and all the supported investment subprojects shall fall under environmental Category B. No Category A subprojects will be approved for funding under SWMP. All subprojects will require examination of environmental risks, development of subproject-specific sets of risk mitigation measures, and planning of environmental monitoring of works. This will be carried out through the Environmental Impact Assessment (EIA) of individual subprojects and development of site-specific Environmental Management Plans (EMPs).

It is expected that WWTPs selected for the project intervention may be discharging into the trans-boundary rivers or rivers flowing into the Black Sea. Therefore, OP/BP 7.50 is triggered by SWMP. Identified subprojects will be examined to see if any measurable qualitative and/or quantitative positive or negative changes may be caused to water flow of the international waterways as a result of their implementation and whether subproject information should be communicated to the riparian countries

OP/BP 4.11 Physical Cultural Resources is triggered to ensure that if construction works are to undertaken in the proximity to cultural and historic heritage sites, they do not affect structural stability of the existing constructions and do not depreciate historical and aesthetic value of heritage sites. This safeguard policy also applies to handling of chance finds in case they are encountered in the course of earth works.

OP/BP 4.12 is triggered to address the cases of possible involuntary land acquisition under the targeted investments. Because the location and footprint of these investments will not be known until implementation, the Resettlement Policy Framework (RPF) is prepared and Resettlement Action Plans (RAPs) for individual subprojects will be developed as needed in line with the RPF. Full compensation of affected people will be completed prior to commencement of civil works at any given subproject site.

The World Bank operational policies also require that all investment designs reflect results of public participation and integrate governmental interests along with those of private businesses and civil society. In this spirit, MDF will ensure that the preparation of Environmental Impact Assessment (EIA) reports and site-specific EMPs for subprojects include consultation with affected parties and public disclosure of the associated documents.

## **8. Subproject Screening and Approval**

The purpose of subproject screening (*Attachment 1*) is to identify the main threats and benefits it carries for the natural environment, social strata, and cultural heritage, and to define possible impacts on international waterways. While risks associated with various subprojects may vary, all of them are expected to fall under environmental Category B. No category A subproject may be supported under SWMP. Such subprojects are ineligible. The due environmental diligence applicable to a subproject will include conduct of an EIA (including development of EIA report and site-specific EMP), defining applicability of the OP/BP 7.50 to a given subproject and preparing communication to the riparian states as deemed necessary..

Social screening is also part of the subprojects' screening and approval process. It allows identifying a need for applying OP/BP 4.12 Involuntary Resettlement to a particular subproject, in which case the next steps and actions will be guided by the RPF adopted by the MDF. Social and cultural resource screening of subprojects will be carried out using the social screening form (*Attachment 2*).

## **9. Environmental and Social Impact Assessment and Management Planning**

The purpose of environmental and social assessment (ESIA) of a proposed subproject is to assess and analyze potential risks for the natural environment, cultural heritage, and social strata, and identify relation of a subproject to the international waterways; specify expected impacts, their scope, magnitude and duration; examine alternatives to the proposed design and technological approaches; identify ways of mitigating expected negative impacts (as well as the possible ways of enhancing positive impacts); estimate costs associated with application of the recommended mitigation measures; and develop a scheme for monitoring application of the prescribed mitigation measures. Potential impacts at the construction phase as well as during operation of the infrastructure supported from the project must be considered in the process of the environmental assessment. Development of an environmental management and monitoring plans is an integral part of the environmental impact assessment process.

## **10. Public Consultation**

The SWMP was prepared with intense and meaningful consultation with all stakeholders, including top management of several line ministries and governing and self-governing bodies of the target municipalities. Preparation of individual subprojects will imply consultation on its environmental and social aspects with the affected communities which will benefit from subprojects and also experience its possible negative impacts. The purpose of consultations will be search of possibilities to amplify expected positive impacts of subprojects and minimizing/mitigating negative aspects of their implementation.

Draft ESIA reports, including EMPs, will be disclosed nation-wide, with particular attention to their availability for local communities, in the language and format convenient for them. ESIA reports with EMPs will be open for commenting and consultation meetings will be held to facilitate local participation. Public opinion will be considered in finalization of draft ESIA reports and the documental evidence of the conducted consultation process will be attached to final ESIA reports and kept on file.

## **11. Environmental Liabilities of MDF and its Contractors**

The EMPs must be finalized prior to tendering works packages and included in the tender documentation, so that potential bidders are aware of environmental performance standards expected from them and are able to reflect that in their bids. Larger scale and discrete mitigation measures shall be included in the Bills of Quantities and priced respectively.

The EMP and Environmental Management Guidelines for Contractors (**Attachment3** to this EMF) become integral parts of a works contract upon its conclusion and their implementation is mandatory for a contractor. The MDF, as a client of construction works, will be responsible for enforcing compliance of contractor with the terms of the contract, including adherence to the EMP. For minor infringements, an incident which causes temporary but reversible damage, the contractor will be given 48 hours to remedy the problem and to restore the environment. If restoration is done satisfactorily during this period, no further actions will be taken. If it is not done during this period, MDF may arrange for another contractor to do the restoration, and deduct the cost from the offending contractor's next payment. For major infringements, causing a long-term or irreversible damage, there will be a financial penalty up to 1% of the contract value in addition to the cost for restoration activities.

## **12. Environmental Monitoring**

Environmental monitoring will be an integral part of MDF's supervisory work in the course of the project implementation. The MDF will be responsible to ensure that on-site managers of works contractors are familiar with EMPs and instruct workers/personnel on the compliance with these EMPs. The MDF will demand from works contractors timely submission of environmental permits for the operation of asphalt/concrete plants (if owned); licenses for the extraction of rock, gravel, and send (if operating quarries); and written agreements with local authorities on the disposal of waste. The MDF will conduct regular on-site monitoring of civil works to verify contractors' adherence to the requirements set out in EMPs, to identify any outstanding environmental issues or risks, and to ensure proper application of the prescribed remedial actions. In case of recorded incompliance with EMPs, MDF will instruct contractors on the corrective measures and closely monitor their further progress.

### 13. Reporting

Documenting of environmental supervision of subprojects is mandatory. Monthly monitoring reports will be generated by filling out field monitoring checklists (**Attachment5** to this EMF), reflecting quality and extent of the application of each mitigation measure prescribed by EMPs. Information provided in checklists should be supported with photo material taken on-site and dated.

Environmental chapters of quarterly progress reports on the project implementation shared with the World Bank will carry more comprehensive, analytical information on the status of environmental performance under the SWMP, including overview of deviations/violations of EMPs encountered over the report period, instructions given to the works contractors for addressing any weaknesses or identified issues, and follow-up actions on the revealed outstanding matters.

Prompt notification of the World Bank on any accidents, emergencies, and unforeseen issues which may occur in the course of works and directly or indirectly affect environment, physical cultural resources, personnel of works providers, and or communities residing in the vicinity of a project site is mandatory regardless timelines of reporting.

Environmental monitoring and reporting under SWMP is an overall responsibility of MDF. Consultant services may be used by MDF for supplementing its in-house institutional capacity for performing these tasks.

***Environmental Screening of Subprojects***

**(A) IMPACT IDENTIFICATION**

|                                                                                                                                              |  |
|----------------------------------------------------------------------------------------------------------------------------------------------|--|
| Has the subproject a significant and/or irreversible impact on the environment which is technically or financially not feasible to mitigate? |  |
| What are the beneficial and adverse environmental effects of the subproject?                                                                 |  |
| Does the subproject implementation relate to international water bodies?                                                                     |  |

**(B) MITIGATION MEASURES**

|                                                                                                                                                     |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|--|
| What alternatives to the subproject design have been considered and what mitigation measures are proposed?                                          |  |
| What lessons from the previous similar subprojects have been incorporated into the project design?                                                  |  |
| Have concerned communities been involved and have their interests and knowledge been adequately taken into consideration in subproject preparation? |  |

**(D) CATEGORIZATION AND CONCLUSION**

Conclusion of the environmental screening:

1. Subproject is:

Declined ☐

Accepted ☐

2. Subproject is expected to have qualitative and/or quantitative impact on the water stream of a trans-boundary water body:

Yes

No ☐

☐

## ***Social and Cultural Resource Screening of Subprojects***

| <b>Social safeguards screening information</b>                                                                                                                                                       |                                                                                                                                                                                 | <b>Yes</b> | <b>No</b> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------|
| 1                                                                                                                                                                                                    | Is the information related to the affiliation and ownership status of the subproject site available and verifiable? (The screening cannot be completed until this is available) |            |           |
| 2                                                                                                                                                                                                    | Will the project reduce other people's access to their economic resources, such as land, pasture, water, public services or other resources that they depend on?                |            |           |
| 3                                                                                                                                                                                                    | Will the project result in resettlement of individuals or families or require the acquisition of land (public or private, temporarily or permanently) for its development?      |            |           |
| 4                                                                                                                                                                                                    | Will the project result in the temporary or permanent loss of crops, fruit trees and Household infrastructure (such as granaries, outside toilets and kitchens, etc)?           |            |           |
| If answer to any above question (except question 1) is "Yes", then <b>OP/BP 4.12 Involuntary Resettlement</b> is applicable and mitigation measures should follow this safeguard policy requirements |                                                                                                                                                                                 |            |           |
| <b>Cultural resources safeguard screening information</b>                                                                                                                                            |                                                                                                                                                                                 | <b>Yes</b> | <b>No</b> |
| 5                                                                                                                                                                                                    | Will the project require excavation near any known historical, archaeological or cultural heritage site?                                                                        |            |           |
| If answer to question 5 is "Yes", then <b>OP/BP 4.11 Physical Cultural Resources</b> is applicable and possible chance finds must be handled in accordance with this safeguard policy.               |                                                                                                                                                                                 |            |           |

## ***Environmental Management Guidelines for Contractors***

### **PURPOSE**

The purpose of these environmental management guidelines for contractors is to define minimum standards of construction practice acceptable to the MDF.

### **ROADS AND FOOTPATHS**

In order to carry out the rehabilitation works, it may be necessary to close or divert certain specified highways and footpaths, either permanently or temporarily during the construction period. The contractor should arrange diversions for providing temporary alternative route for transport and/or pedestrians.

After breaking up, closing or otherwise interfering with any street or footpath to which the public has access, the Contractor shall make such arrangements as may be reasonably necessary so as to cause as little interference with the traffic in that street or footpath during construction of the rehabilitation works as shall be reasonably practicable.

Wherever the rehabilitation works interfere with existing public or private roads or other ways over which there is a public or private right of way for any traffic, the Contractor shall construct diversion ways wherever possible. The standard of construction and lighting shall be suitable in all respects for any class of traffic using the existing ways, and the widths of the diversions shall not be less than that of the existing way wherever possible. Diversion ways shall be constructed in advance of any interference with the existing ways and shall be maintained to provide adequately for the traffic flows.

The Contractor shall be responsible for supplying, erecting and maintaining for the requisite periods all statutory and public information notices.

### **MOVEMENT OF TRUCKS AND CONSTRUCTION MACHINERY**

The Contractor moving solid or liquid construction materials and waste shall take strict measures to minimize littering of roads by ensuring that vehicles are loaded in such a manner as to prevent falling off or spilling of construction materials and by sheeting the sides and tops of all vehicles carrying mud, sand, other materials and debris.

The Contractor shall also take all reasonable measures to avoid to the extent possible that delivery vehicles park on the highways prior to entering the construction site.

## **TRAFFIC SAFETY MEASURES**

The Contractor shall provide, erect and maintain such traffic signs, road markings, lamps, barriers and traffic control signals and such other measures as may be necessary for ensuring traffic safety around the rehabilitation site. The Contractor shall not commence any work that affects the public motor roads and highways until all traffic safety measures necessitated by the work are fully operational.

## **ACCESS ACROSS THE CONSTRUCTION SITE AND TO FRONTAGES**

In carrying out the rehabilitation works, the Contractor shall take all reasonable precautions to prevent or reduce any disturbance or inconvenience to the owners, tenants or occupiers of the adjacent properties, and to the public generally. The Contractor shall maintain any existing right of way across the whole or part of the rehabilitation site and public and private access to adjoining frontages in a safe condition and to a standard not less than that pertaining at the commencement of the contract. If required, the Contractor shall provide acceptable alternative means of passage or access to the satisfaction of the persons affected.

## **PROTECTION OF THE EXISTING INSTALLATIONS**

The Contractor shall properly safeguard all buildings, structures, works, services or installations from harm, disturbance or deterioration during the concession period. The Contractor shall take all necessary measures required for the support and protection of all buildings, structures, pipes, cables, sewers, railways, or other apparatus during the concession period and absorb responsibility for compensation of loss in case of damage.

## **USE OF THE EXISTING STRUCTURES**

The Contractor shall not locate stockpiles for materials, stores, plant or temporary works upon or adjacent to or under existing structures such as bridges, viaducts, towpaths, walls and embankments in such a way as to endanger these structures.

## **NOISE AND DUST CONTROL**

The Contractor shall take all practicable measures to minimize nuisance from dust and noise from the rehabilitation sites. This includes:

- Respecting normal working hours in or close to residential areas;
- Maintaining equipment in a good working order to minimize extraneous noise from mechanical vibration, creaking and squeaking, as well as emissions or fumes from the machinery;
- Shutting down equipment when it is not directly in use.

## **WATER SUPPLY CONFLICTS**

The Contractor must ensure that the workforce have adequate access to a safe water supply, which is not provided to the detriment of services to the local population. If there is a risk of

competition for limited water resources, then the Contractor must ensure that the local supply is not affected, and that workforce is provided with an alternative source if necessary (e.g. tanked and stored water).

## **WASTE DISPOSAL**

The Contractor must agree with the Client municipality about arrangements for construction waste disposal. The municipality shall designate a dumping site or landfill for the disposal of solid waste. Should any hazardous waste be involved and unexpectedly encountered, the Contractor must inform the Client municipality on the above and strictly follow the Client's guidance for disposal of such waste.

## **SOIL PROTECTION**

The Contractor must take all practicable measures to avoid degradation and erosion of soil. The use of heavy machinery must be limited to the extent possible for avoiding land compaction. Soil erosion and slope instability should be addressed through hillside terracing, tree planting and construction of check dams.

## **PROTECTION OF TREES AND OTHER VEGETATION**

The Contractor shall avoid loss of trees and damage to other vegetation wherever possible and do compensatory planting/greening if the removal of vegetation is inevitable or if the damage occurs accidentally. Adverse effects on green cover within or in the vicinity of the rehabilitation site shall be minimized by adequate selection of access routes, piling and storage locations for construction materials and parking lots for heavy machinery.

## **EMERGENCY CONTACTS AND PROCEDURES**

The Contractor shall prepare and maintain emergency contact information for each rehabilitation site which shall be displayed prominently and accessible for all personnel. Emergency contact information shall contain phone numbers and the method of notifying local authorities/services for action in case of fire, health emergencies, disorder in communications, emergency release of hazardous materials, etc.

## **CLEARANCE OF REHABILITATION SITE ON COMPLETION**

The Contractor shall clear up all working areas both within and outside the rehabilitation site and accesses as work proceeds and when no longer required for the carrying out of the rehabilitation works. All surplus soil and materials, temporary roads, plant, sheds, offices and temporary fencing shall be removed, post holes filled, and the work site restored to the original status or harmonized with the surrounding landscape to the extent the newly constructed infrastructure permitting.

## ***Proposed Format of ESIA Report***

Executive Summary  
Introduction  
Technical and Environmental Standards and Regulations  
Environmental Screening Outcome  
Public Participation  
Sensitive Environmental and Social Receptors and Potential Impacts  
Project Alternatives  
Project Description  
Environmental Impact Assessment Methodology  
Environmental and Social Baseline  
Expected Impacts and Mitigation  
Environmental Management Plan  
Operation of WWTP

CHAPTER 1. Introduction  
CHAPTER 2. Legal and Policy Framework  
CHAPTER 3. Technical and Environmental Standards and Regulations  
CHAPTER 4. Subproject Description  
CHAPTER 5. Analysis of Alternatives  
CHAPTER 6. ESIA Methodology  
CHAPTER 7. Physical, Natural, and Social Environment  
CHAPTER 8. Sensitive Receptors and Potential Impacts  
CHAPTER 9. Impact Mitigation  
CHAPTER 10. Environmental Management Plan  
Annex 1. Environmental Management Matrix  
Annex 2. Public Consultation  
Annex 3. References  
Annex 4. Maps, Graphs, Pictures  
Annex 5. EIA Team Composition

# Attachment 5



## Project Analysis Division Environmental Analysis and Resettlement Unit Environmental Impact Monitoring

| Description and Location of the Site    |                                                                                                                    |        |           |    |     |                                                                         |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------|-----------|----|-----|-------------------------------------------------------------------------|
| Name of the Contractor                  |                                                                                                                    |        |           |    |     |                                                                         |
| Date of Visit (Year/Month/Day)          |                                                                                                                    |        |           |    |     |                                                                         |
| Supervisor's Identity (name, last name) |                                                                                                                    |        |           |    |     |                                                                         |
| Current Stage of Civil Works            |                                                                                                                    |        |           |    |     |                                                                         |
| Documents and Facts to be Examined      |                                                                                                                    | Status |           |    |     | Comment                                                                 |
|                                         |                                                                                                                    | Yes    | Partially | No | N/A |                                                                         |
| Permits, Contracts                      | The Contractor has a License for extraction of natural resources                                                   |        |           |    |     | (date, number)                                                          |
|                                         | The Contractor has an environmental permit for production of construction materials (cement, asphalt, brick, etc.) |        |           |    |     | (date, number)                                                          |
|                                         | The Contractor has a permit for final disposal of construction waste                                               |        |           |    |     | (date, issuing authority, title of the site allocated for this purpose) |

|                            |                                                                                                                                          |  |  |  |  |                                  |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|----------------------------------|
|                            | The Contractor has executed the contract on the hand-over and disposal of hazardous waste (with the licensed organization)               |  |  |  |  | (date, name of the organization) |
| Performance of Civil Works | The site is fenced and warning signs are arranged                                                                                        |  |  |  |  |                                  |
|                            | The construction works do not impede pedestrian and motor traffic, or the temporary detour routs are organized.                          |  |  |  |  |                                  |
|                            | The working hours are observed in the human settlements and their vicinity                                                               |  |  |  |  |                                  |
|                            | During the required temporary disruptions of water, power or gas supply, the customers are notified in advance                           |  |  |  |  |                                  |
|                            | The construction machinery and equipment is in good order (there is no leakage of fuels and lubricants, nor excess noise and emissions). |  |  |  |  |                                  |
|                            | The construction materials and waste are temporarily stored in the specific place on-site, designated for this purpose                   |  |  |  |  |                                  |
|                            | The construction waste is transported from the site on regular basis, to the officially designated (in writing) site                     |  |  |  |  |                                  |
|                            | During transportation, the construction materials and waste are placed on the covered hood                                               |  |  |  |  |                                  |
|                            | The site is watered during the periods of intensive dust generation and dry weather conditions                                           |  |  |  |  |                                  |
|                            | The containers for collection of domestic waste are placed in the construction site/camp                                                 |  |  |  |  |                                  |
|                            | The construction camp is supplied with water and toilets in good sanitary condition.                                                     |  |  |  |  |                                  |

|                   |                                                                                                                                                                  |  |  |  |  |  |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
|                   | During excavation works, in case of any archeological chance finds, the works are suspended and the employer is notified in written form.                        |  |  |  |  |  |
| Safety Measures   | The workers use all personal safety equipments required for individual technological processes (hard hats, gloves, respirators, glasses, etc.)                   |  |  |  |  |  |
|                   | The sites are provided with the fire fighting and emergency medical aid kits                                                                                     |  |  |  |  |  |
| Works' Completion | After completion of main works, the site undergoes final cleanup, harmonization with outward landscape and landscaping                                           |  |  |  |  |  |
|                   | After completion of the operations in the quarry or its certain section, the idle material is backfilled, compacted, terraced and harmonized with the landscape. |  |  |  |  |  |

**Public Consultation Meeting**  
**Minutes**

**Environmental Management Framework**

**Resettlement Policy Framework**

**Sustainable Wastewater Management Project**

In order to discuss the Environmental Management Framework (EMF) and Resettlement Policy Framework (RPF) prepared for the Sustainable Wastewater Management Project which includes two or three sub-projects related to rehabilitation of wastewater treatment plants, on May 1, 2013, a consultation meeting was held at the office of Municipal Development Fund of Georgia.

The inhabitants were informed about the public hearing in advance as the respective Statements were placed at the information boards of Gangeoba building of Telavi and Tskaltubo municipalities. Also the documentation was sent by e-mail to the interested Municipalities. The electronic versions of EMF and RPF were published on MDF web-site.

At the meeting were discussed the Environmental and Resettlement legal requirements of Georgia and World Bank (WB). The structure, contents, legal background and requirements of the EMF and RPF which are the part of the Operations Manual of SWMP.

**Representatives of MDF:**

| <b>Name</b>          | <b>Organization</b>                                                                                                            |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Alexander Lejava     | Chief Specialist<br>International Organization Relations Division<br>Municipal Development Fund of Georgia (MDF)               |
| Shalva Kokochashvili | Chief Specialist<br>International Organization Relations Division<br>Municipal Development Fund of Georgia (MDF)               |
| Aleksandre Dumbadze  | Head of Environmental Protection Analysis and Resettlement Division<br>Municipal Development Fund of Georgia (MDF)             |
| Nino Patarashvili    | Chief Specialist<br>Environmental Protection Analysis and Resettlement Division<br>Municipal Development Fund of Georgia (MDF) |
| Nikoloz Soselia      | Specialist<br>Environmental Protection Analysis and Resettlement Division<br>Municipal Development Fund of Georgia (MDF)       |
| Ekaterine Mumladze   | Specialist<br>Environmental Protection Analysis and Resettlement Division<br>Municipal Development Fund of Georgia (MDF)       |
| Natia Jugeli         | Specialist<br>Legal Unit<br>Municipal Development Fund of Georgia (MDF)                                                        |

Public Consultation was attended by attorneys of the Tskaltubo and Telavi Municipalities and representatives of United Water Supply Company of Georgia (See the photos).







**List of attendees is attached below.**

The meeting was opened by Alexander Lejava, representative of the MDF and informed the attendees of the meeting about.

Alexander Lejava and Shalva Kokochashvili (MDF staff members) introduced about the MDF infrastructure project activities in cities Tskaltubo and Telavi, which are on different stages (completed, ongoing, and planned). Also there was discussed about importance of the said activities for the tourism development, existing situation and possible results in future. It was mentioned, that the rehabilitation of the sewerage treatment plant will have a very positive impact for tourism and cultural heritage centers' development and it's connected with the economical infrastructure service and institutional capacity building.

Nino Patarashvili, the chief specialist of Environmental Protection Analysis and Resettlement Division of MDF presented to the attendees the information about Environmental Management Framework (EMF) and Resettlement Policy Framework (RPF) prepared for the above SWMP. She informed the participants of the objectives of preparation of the above-mentioned documents. Updated the public on the legal background, structure and contents of the documents. At the meeting were discussed the topics concerning resettlement and natural and social environment, including EMF and RPF and the legal requirements of Georgia and the WB, methodology and format of preparation of environmental and resettlement documentation and the issues of their coordination, implementation and monitoring, as well as the obligations, responsibilities and reporting obligations of the stakeholders.

They also were informed about public rights and possible involvement in the consultation process during preparation of environmental and social (resettlement) documentation.

The following main topics were presneted during the meeting:

■ **Brief description of Project and sub-projects under SWMP;**

■ **Introduction to the Resettlement Policy Framework (RPF)**

- Policy, Legal and Administrative Framework
- The World Bank Policy, Safeguards and Georgian Legislation
- Principles of Resettlement and Land Acquisition Adopted for the RDP II
- Eligibility and Entitlements
- Implementation
- Agreements
- Grievance Redress Mechanism
- Outline of a Resettlement Action Plan

■ **Introduction to the Environmental Management Framework (EMF)**

- Environmental Compliance of the Project
- Subproject Screening and Approval
- Environmental Review and Environmental Management Planning
- Public Consultation
- Environmental Liabilities of MDF Contractors

- Environmental Monitoring
- Reporting

■ **Involvement of population in consultation processes.**

Before completion of the meeting, the MDF representatives requested the Telavi and Tskaltubo Municipality authorities to assist the MDF in the silt disposal and management at the municipal level, since the silt management issue is the main problem arising in the process of the wastewater treatment plant project implementation.

The presentation was followed by debates. the Q&A session held by the MDF staff is given in annex in the form of the table #1.

Q&A session:

| <b>Question/Comment</b>                                                                                                                                                                                                    | <b>Comments</b>                                                                                                                                                                                               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Who will prepare the environmental and social documentation?                                                                                                                                                               | The Grant Agreement will provide for the parties in charge of the project implementation, presumably the documentation will be prepared in agreement and intercoordination with and between the MDF and UWCG. |
| In case if the preparation of RAP is necessary for sub-project implementation, who will pay the compensation amounts?                                                                                                      | In similar cases payments as a rule are effected from the central budget.                                                                                                                                     |
| The representatives of Telavi and Tskaltubo Municipalities made clear that construction of both WTP-s is planned in the territory of the old WTP-s, which is not alienated, therefore there will be need for resettlement. | In order to prevent further complications, before commencement of the design works it is necessary to conduct the surveys of the design areas and to obtain all documents on the right of ownership.          |

ჩამდინარე წყლების მდგრადი განკარგვის პროექტი

ქ. თბილისში დაგეგმილი გარემოსდაცვითი მართვის ჩარჩო დოკუმენტის და  
განსახლების პოლიტიკის ჩარჩო დოკუმენტის საჯარო განხილვა

შეხვედრაზე დამსწრეთა სია

ქ. თბილისი

01.05.2013 წ.

| #  | სახელი და გვარი     | საკონტაქტო ინფორმაცია                                       | ხელმოწერა                              |
|----|---------------------|-------------------------------------------------------------|----------------------------------------|
| 1. | ბაყალი ჩხეიძე       | საქ. ვიეს ნაღ. კომ. ნაღ. ნაღ. 1. მთავრის ქუჩის              | ბ. ჩხეიძე<br>chokhizi@gmail.ru         |
| 2. | ბესიკ ნიბლაძე       | კეჩი, ნაღ. კომ. კახეთის რეგიონის სოფ. ნიბლაძე, თბ. 57711777 | ბ. ნიბლაძე<br>besik_nibladze@yahoo.com |
| 3. | გორგიშვიტი მამუკაძე | ბაყალი, ნაღ. კომ. განსახლება სამხრეთ-აღმოსავლეთი            | გ. მამუკაძე                            |
| 4. | დიმიტრი გელაძე      | ნაღ. კომ. მთ. რაიონი, თბ. 106. 20. 199                      | დ. გელაძე                              |
| 5. | ვარლამ ცხავეაძე     | ნაღ. კომ. მთ. რაიონი, თბ. 106. 20. 199                      | ვ. ცხავეაძე<br>VARLAM555@gmail.com     |
| 6. | მედიკალიზაცია       | ნაღ. კომ. მთ. რაიონი, თბ. 106. 20. 199                      | მ. მედიკალიზაცია<br>m1083@mail.ru      |
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| #   | სახელი და გვარი    | საკონტაქტო ინფორმაცია                                   | ხელმოწერა                            |
|-----|--------------------|---------------------------------------------------------|--------------------------------------|
| 8.  | შალვა გასიტაძე     | საქ. გარე ურთიერთობებში<br>შრომის სპეც. განყოფილება     | შ. გასიტაძე<br>shalva.gasita@mail.ru |
| 9.  | სოსო კვდოშვილი     | საქ. კულტურის, სპორტისა და<br>გაზაფხულის განყოფილება    | ს. კვდოშვილი                         |
| 10. | არჩილ ტყეშელაშვილი | მეც.-სტრუქტურული ანგარიშისა და<br>განხილვის განყოფილება | არჩილ ტყეშელაშვილი                   |
| 11. | არჩილ ტყეშელაშვილი | მეც.-სტრუქტურული ანგარიშისა და<br>განხილვის განყოფილება | არჩილ ტყეშელაშვილი                   |
| 12. | ნათია ტყეშელაშვილი | მეც.-სტრუქტურული ანგარიშისა და<br>განხილვის განყოფილება | ნათია ტყეშელაშვილი                   |
| 13. | ნათია ტყეშელაშვილი | მეც.-სტრუქტურული ანგარიშისა და<br>განხილვის განყოფილება | ნათია ტყეშელაშვილი                   |
| 14. | ნინო კახიკაძე      | მეც.-სტრუქტურული ანგარიშისა და<br>განხილვის განყოფილება | ნინო კახიკაძე                        |
| 15. | შალვა კახიკაძე     | მეც.                                                    | შალვა კახიკაძე                       |
| 16. | დავით კახიკაძე     | მეც.                                                    | დავით კახიკაძე                       |
| 17. |                    |                                                         |                                      |