



**US Agency for International Development (USAID)
USAID/Caucasus**

Amendment 2 of Initial Environmental Examination (IEE)

Program/Project/Activity Data

Activity/Project Name:	Waste Management Technologies in Regions Program II	
Assistance Objective:	Economic Growth	
Program Area:	Environment	
Country(ies) and/or Operating Unit:	Georgia	
Originating Office:	Office of Economic Growth	Date: September 19, 2016
PAD Level IEE: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	DCN of Original RCE/IEE:	DCN: 2012-GEO-073
Supplemental IEE: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	DCN of Amendment(s):	DCN: 2013-GEO-054
RCE/IEE Amendment: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
If Yes, Purpose of Amendment (AMD):	Add New activities and extend through FY 2019	
DCN(s) of All Related EA/IEE/RCE/ER(s):		
Implementation Start/End:	AMD:FY2017 – FY 2019	LOP: FY2013-FY2019
Funding Amount:		LOP Amount: \$ 7,551,613
Contract/Award Number (if known):		
Recommended Environmental Determination:		
Categorical Exclusion: <input checked="" type="checkbox"/>	Positive Determination: <input checked="" type="checkbox"/>	
Negative Determination: <input checked="" type="checkbox"/>	Deferral: <input type="checkbox"/>	
Additional Elements:		
Conditions: <input checked="" type="checkbox"/>	Local Procurement: <input checked="" type="checkbox"/>	
Government to Government: <input type="checkbox"/>	Donor Co-Funded: <input type="checkbox"/>	
Sustainability Analysis (included): <input type="checkbox"/>	Climate Change Vulnerability Analysis (included): <input type="checkbox"/>	

1. Background and Project Description

- 1.1. **Purpose and Scope of IEE:** The Waste Management Technologies in Regions project is covered by an original IEE and amendment. Next year the project will start the second phase of Waste Management Technologies in Regions project. The purpose of this amendment is to cover new activities and extend the project through FY 2019.
- 1.2. **Project Overview:** The purpose of the Waste Management Technologies in Regions Program phase II is to provide professional waste management technical assistance and sub-grants to support waste management system development and recycling in Georgia. The activities assigned under this program will promote development of the waste management sector, including waste collection, recycling, and public awareness. This program will enable a recycling business environment in targeted regions and municipalities, improve waste separation and collection systems, minimize pollution of natural resources from landfills, by closing out old, illegal landfills and dumpsites, enhance public awareness of waste management issues, and ensure equal participation of women and men in the decision-making process related to waste management systems.
- 1.3. **Project Description** waste management program will assist the GOG in implementation of its waste management strategy and action plan, implement pilot interventions in select municipalities to demonstrate the efficacy of these solutions, minimize adverse impacts from waste on human

health and natural resources, and minimize pollution of natural resources from landfills. These objectives will be achieved by engaging the private sector, local communities, non-governmental organizations (NGOs), GOG authorities, community-based organizations (CBOs), and youth from targeted municipalities. Approximately 15% of the program costs will be spent on sub-grants and sub-contracts, which can be cost-shared with recipients. These sub-awards should support the development of waste management, including waste separation, collection, and recycling in targeted municipalities. The recipient will develop and implement strategies that ensure equal participation of women and men in decision-making and waste management and disposal activities. Throughout the life of the program, WMTR-II will concentrate on assisting the local government in target regions with implementation of waste management laws, regulations, and action plans required by the Waste Management Code of Georgia. The program will also work to introduce modern waste management systems to help GOG meet its international commitments and to help businesses to comply with new laws and regulations on waste management.

The program will provide support to the Solid Waste Management Company of Georgia and local governments in closing and remediation of the old landfills and illegal dumpsites. Illegal dumps diminish the quality of life and livability of the surrounding area. Illegal dumping of garbage, discarded appliances, old barrels, used tires, furniture, yard debris, oil, antifreeze and pesticides threaten human health, wildlife and the environment. In addition, these illegal dumps pollute local waterways and groundwater and can cause injury to children playing in or around the dumps. Garbage in these dump sites become breeding grounds for mosquitoes and other noxious insects including rodents that transmit disease. Illegal dumps depress the value of surrounding land and neighborhoods. The program will identify address differential impacts waste disposal practices have on girls and boys, and women and men.

The WMTR-II program will work with the private sector, government, donors, and public to raise awareness and facilitate the public-private dialogue on waste management issues. Furthermore, the program will support public-private partnerships (PPPs). The implementer will be encouraged to forge PPPs with large enterprises, such as Goodwill, Carrefour, Marriott, Radisson, Hilton, McDonalds, etc., to increase the supply of recyclable materials and promote waste separation to collective recyclers. The implementer will also provide incentives for start-ups and expansions of recycling businesses in Georgia. WMTR-II will continue strengthening the capacity of the Waste Management Association to advocate on behalf of its members to GOG and to work with GOG to improve the business-enabling environment for the recycling sector.

WMTR-II will work closely with GOG institutions, local and regional authorities to implement the key findings and recommendations of the tariff and cost recovery methodology prepared by WMTR-I program. The program will continue raising awareness and building capacity of key stakeholder groups, with the focus on youth and women to support the introduction of waste separation and recycling schemes. All these activities will support GOG to implement the National Waste Management strategy and action plan, and comply with the requirements of the EU-Georgia Association Agreement.

In addition, the program will help to implement an integrated, regionally based waste management approach with the direct participation of regional governments, the SWMCG, local municipalities, local communities and authorities, youth, and the private sector such as the recycling industry and waste management companies. The program will support awareness among local communities and youth; increase and improve waste recycling; improve waste separation, collection and recycling and temporary waste collection points; provide assistance with the implementation of guidelines and standards for the operation and management of waste facilities; provide assistance in implementation of the landfill remediation and closing plans, and finally, provide assistance to recycling facilities in the development of business plans and utilization of energy and cost efficient technologies and equipment. The program will include measures to ensure that any information campaign for behavioral change in waste management (for example, the reduction of waste and recycling) target women and that the entities managing waste disposal and landfills implement an equal opportunities policy for men and women in the work place.

Public participation and awareness is critical for the successful implementation of a waste management plan. Environmental education on waste recycling, reusing, and separation will begin in primary education and extend into youth engagement activities.

To ensure effectiveness, the program will use an evidence-based analysis on waste separation and recycling sectors, including the data collected by WMTR – I during years one-three (Cost Benefit Analysis, waste composition studies, etc.). WMTR-II’s interventions will be based on the market research on industry practices, opportunities, obstacles, and stakeholders.

The project has four components:

- 1.3.1. Component 1 – Implementation of Integrated Waste Management System
- 1.3.2. Component 2 – Private Sector-Led Recycling
- 1.3.3. Component 3 – Illegal Dumping Penalties and Tariff Policy
- 1.3.4. Component 4 – Public Outreach

2. Baseline Environmental Information

2.1. Locations Affected and Environmental Context

Georgia faces numerous environmental challenges including poor waste management, air and water pollution, insufficient land use regulations, coastal and marine pollution, inappropriate use of chemicals, lack of environmental protection, and the environmental effects of increasing tourism. Due to various political and economic priorities, the government has only recently begun to shift more attention to the management of municipal and industrial waste, hazardous chemicals, medical waste, and contaminated sites. However, Georgia lacks the financial resources, research and data, and institutional capacity needed for an environmentally sound waste management system. At the national level, Georgia lacks a legal framework and comprehensive strategy on waste management. Consequently, problems arise at each step in the waste management planning process. However, the Government of Georgia (GOG) developed a National Waste Strategy and National Waste Management Plan in 2015, which includes an integrated waste management system. This covers all stages of the process, such as waste generation; collection; storage and handling; transport to treatment, recycling and recovery units; final disposal; and the establishment of a waste collection tariff for each region, which is currently too low to cover the cost of collection.

Georgia has approximately 65 uncontrolled landfills covering 300ha of Georgian territory, not including Abkhazia, South Ossetia, or the Autonomous Republic of Adjara. None of the existing landfills in Georgia complies with international standards, nor do they include separation or waste-based energy production. In addition to these landfills, there are hundreds of unofficial dumpsites in rural Georgia, where municipal waste services are inadequate or nonexistent. These rural areas face health and environmental problems due to improper waste disposal, such as disposal along rivers and burning waste next to residential areas, both of which are harmful to the environment and human health. Recycling facilities are scarce and those in operation are owned by private sector entities and function on small scale.

The Ministry of Regional Development and Infrastructure (MRDI) has created a new office that will work specifically on waste management issues. The Ministry plans to take a regional approach and reduce the number of landfills from 53 to fewer than 10. The small dumpsites and uncontrolled landfills will be closed and each region will be assigned one landfill, depending on its size, though temporary waste collection points may be established to help transfer waste to the regional landfill during a transition period. Such drastic measures will need to be planned very carefully. The closures and associated remediation measures will need to be designed and implemented properly to avoid adverse impacts on the environment and human health.

In conjunction with emerging national efforts, several regions—Adjara, Imereti and Shida Kartli—are also developing waste management plans and strategies. In general, local authorities are willing to improve waste management. Most, if not all, recognize the negative effect that a degraded environment can have on quality of life and the local economy, especially in attracting tourism. As

such, waste collection has improved in the last five years, resulting in cleaner streets and residential areas. However, given the various challenges outlined above, waste management at the municipal level is still inadequate. Larger cities are further challenged by urbanization trends that have led to population increases and consequently higher waste production.

2.2. **Description of Applicable Environmental and Natural Resource Legal Requirements Policies, Laws, and Regulations**

Environmental Legislative Framework: The National Environmental Action Plan (NEAP, 2000) and National Biodiversity Strategy and Action Plan (NBSAP, 2005) are the main national level policy documents related to biodiversity conservation. Both of these documents are outdated and not used in practice in Georgia. The Ministry of Environment of Georgia began the process of preparing a new NEAP and NBSAP in 2009. Georgia is a party to the major international treaties concerning biodiversity and natural resources. These include: Convention on Biological Diversity 1994, United Nations Framework Convention on Climate Change 1994, Convention on International Trade in Endangered Species of Wild Fauna and Flora 1996, Convention on Wetlands of International Importance especially as Waterfowl Habitat 1997, Convention on the Conservation of Migratory Species of Wild Animals 2000, Agreement on the Conservation of Bats in Europe 2002, and a number of others. The most relevant to biodiversity conservation include: Convention on the Conservation of European Wildlife and Natural Habitats (2009), Cartagena Protocol on Biosafety to the Convention on Biological Diversity (2009); and the Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and others. Georgia has a significant number of laws, President's orders and Government acts on environmental protection.

Some examples include:

- The Law on Environmental Protection (1999 and updated)
- Law on Environmental Impact Permit (1991 and updated)
- Law on Ecological Expertise (2007)
- Law on Protected Areas
- Forestry code (under the process of updating)
- Water law (under the development)
- Red Book

The Law on Ecological Expertise of 2007 remains the framework for environmental impact assessments (EIAs) that apply to new projects that may have adverse impacts on the environment. EIAs are part of the state ecological expertise (SEE) authority. Citizens and public organizations have access to EIAs and can express their views according to Aarhus and Espo conventions.

The new Waste Management Code in action adopted in January 2015.

3. **Analysis of Potential Environmental Impact**

The typical municipal solid waste stream will contain general wastes (organics and recyclables), special wastes (household hazardous, medical, and industrial waste), and construction and demolition debris. Most adverse environmental impacts from solid waste management are rooted in inadequate or incomplete collection and recovery of recyclable or reusable wastes, as well as codisposal of hazardous wastes. These impacts are also due to inappropriate siting, design, operation, or maintenance of dumps and landfills.

Improper waste management activities can:

- **Increase disease transmission or otherwise threaten public health.** Rotting organic materials pose great public health risks, including, as mentioned above, serving as breeding grounds for disease vectors. Waste handlers and waste pickers are especially vulnerable and may become vectors, contracting and transmitting diseases when human or animal excreta or medical wastes are in the waste stream. Risks of poisoning, cancer, birth defects, and other ailments are also high.
- **Contaminate ground and surface water.** Municipal solid waste streams can bleed toxic materials and pathogenic organisms into the leachate of dumps and landfills. (Leachate is the liquid discharge of dumps and landfills; it is composed of rotted organic waste, liquid wastes, infiltrated rainwater and extracts of soluble material.) If the landfill is unlined, this runoff can contaminate ground or surface water, depending on the drainage system and the composition of the underlying soils. Many toxic materials, once placed in the general solid waste stream, can be

treated or removed only with expensive advanced technologies. Even after organic and biological elements are treated, the final product remains harmful.

- **Create greenhouse gas emissions and other air pollutants.** When organic wastes are disposed of in deep dumps or landfills, they undergo anaerobic degradation and become significant sources of methane, a gas with 21 times the effect of carbon dioxide in trapping heat in the atmosphere. Garbage is often burned in residential areas and in landfills to reduce volume and uncover metals. Burning creates thick smoke that contains carbon monoxide, soot and nitrogen oxide, all of which are hazardous to human health and degrade urban air quality. Combustion of polyvinyl chlorides (PVCs) generates highly carcinogenic dioxins.
- **Damage ecosystems.** When solid waste is dumped into rivers or streams it can alter aquatic habitats and harm native plants and animals. The high nutrient content in organic wastes can deplete dissolved oxygen in water bodies, denying oxygen to fish and other aquatic life form. Solids can cause sedimentation and change stream flow and bottom habitat. Siting dumps or landfills in sensitive ecosystems may destroy or significantly damage these valuable natural resources and the services they provide.
- **Injure people and property.** In locations where housing exist near open dumps or near badly designed or operated landfills, landslides or fires can destroy homes and injure or kill residents. The accumulation of waste along streets may present physical hazards, clog drains and cause localized flooding.
- **Discourages tourism and other business.** The unpleasant odor and unattractive appearance of piles of uncollected solid waste along streets and in fields, forests and other natural areas can discourage tourism and the establishment and/or maintenance of businesses.

The Waste Management Technologies program II is intended to address many of these impacts through the strengthening of services providers, design interventions to clean up illegal landfills.

3.1. Component 1: Implementation of Integrated Waste Management System

Defined/Illustrative Activities	Potential Impacts
1.1 Assist local municipalities and the region to design and implement gender-sensitive regional waste management plans. This will be done in cooperation with waste collection companies, landfill facilities, recycling and aggregating businesses this activity - <i>revised 1.2 activity of WMTR-I</i>	No impacts
1.2 Assist the local government in the development of a closing and remediation plan for the illegal/unmonitored landfills and dumpsites - <i>revised 1.7 activity of WMTR-I</i>	Persistent illegal landfills and improperly sited and/or designed landfills pose significant threats to the environment and public health and safety.

3.2. Component 2: Private Sector-Led Recycling

Defined/Illustrative Activities	Potential Impacts
2.1 Identify key products, marketing and sales channels, and potential private companies in waste separation and recycling sectors based on the market research conducted by WMTR-I. The program will support cooperation the waste separation and recycling companies with large importers, retailers, manufacturers, hotel chains, etc. – <i>new activity</i>	No impacts
2.2 Identifying key findings, the implementer will work on the national level and with GOG to enhance a	No impacts

Defined/Illustrative Activities	Potential Impacts
recycling business environment in Georgia, and, build advocacy capacity of the Waste Management Association launched with support of WMTR-I program – <i>new activity</i>	
2.3 Identify recycling and aggregating companies and assess their business operations, demand and supply, gaps and needs, assist the companies in developing and implementing business plans focused on improving operations, increasing revenues and/or reducing operational costs. Technical assistance, and training in business and management will be provided and business linkages established between waste separations, collection, recycling and aggregating companies – <i>revised 2.3 activity of WMTR-1</i>	No impacts
2.4 Assist aggregating and recycling companies in the deployment of modern and efficient equipment, improving the associated technical skills and introducing effective and efficient production processes to increase the quality of recycled products. Under this component, approximately 15% of the program costs will be spent on sub-grants and sub-contracts that will be cost-shared with recipients - <i>revised 2.4 activity of WMTR-1</i>	Inadequate operational procedures can lead to impacts to land and water
2.5 Assist recycling companies in the development of marketing plans, and improving marketing and labeling practices for recycled products, which will serve to stimulate the demand on recycled products in Georgia – <i>revised 2.6 activity of WMTR-1</i>	No impacts
2.6 Assist recycling companies in introducing quality control systems. This may include the development of a manual or other tool to ensure product quality before the final products reach the market – <i>continuing 2.7 activity of WMTR-1</i>	No impacts
2.7. Assist project stakeholders in developing strategies that ensure equal access and participation of women and men in decision-making and improved waste management practices – <i>new activity</i>	No impacts

3.3. Component 3: Illegal Dumping Penalties and Tariff Policy

Defined/Illustrative Activities	Potential Impacts
3.1 Work closely with GOG institutions, local and regional authorities to implement Cost Recovery Tariff Methodology prepared by WMTR-I program. The methodology will be tailored to the needs of municipalities and elaborated taking into consideration institutional capacities, socio-economic background, legislation and public awareness – <i>revised 3.1 activity of WMTR-1</i>	No impacts
3.2 Work closely with relevant GOG institutions to strengthen implementation/enforcement of Waste	No impacts

Defined/Illustrative Activities	Potential Impacts
Management Code in action and increase capacity of local municipal authorities to fully execute the new Code - <i>new activity</i>	
3.3 Assist the local government to develop systems to ensure proper disposal of waste – <i>new activity</i>	No impacts

3.4. Component 4: Public Outreach

Defined/Illustrative Activities	Potential Impacts
4.1 Build capacity of all stakeholders involved in supporting recycling, including but not limited to the private sector, local government, and NGOs, to promote the 4Rs - reduce, reuse, repurpose and recycle - attitudes and work towards that change in behavior over time – <i>revised 4.1 activity of WMTR-1</i>	No impacts
4.2 Increase waste management knowledge within communities, women and men, youth groups, and school students to increase awareness of and engage in separation, recycling, and other waste management activities. This will take into account differential impacts of waste management and disposal practices on women and men. The project may consider giving small grants, up to \$600 to implement waste management and recycling campaigns and support activities in their community and/or school – <i>revised 4.4 activity of WMTR-1</i>	No impacts
4.3 Support 4Rs education among school students in target communities – <i>new activity</i>	No impacts
4.4 Promote the concept and benefits of separation and recycling – <i>new activity</i>	No impacts
4.5 Involve businesses to advocate and promote waste separation and recycling as a part of their corporate social responsibility – <i>new activity</i>	No impacts

4. Recommended Environmental Actions

- 4.1. Recommended Mitigation Measures Recommended Mitigation Measures are specified in the table below for each illustrative or defined activity. Most mitigation measures can be implemented as part of the design of the projects implementation factoring in environmental concerns and ensuring they are properly addressed as part of each activity.

Component 1 – Implementation of Integrated Waste Management System

Defined/Illustrative Activities	Potential Impacts	Mitigation Measures	Recommended Threshold Determination
<p>1.1 Assist local municipalities and the region to design and implement gender-sensitive regional waste management plans. This will be done in cooperation with waste collection companies, landfill facilities, recycling and aggregating businesses.</p>	<p>No impacts</p>		<p>Catex</p>
<p>1.2 Assist the local government in the development of a closing and remediation plan for the illegal/unmonitored landfills and dumpsites.</p>	<p>Design of the closing and remediation plans should be done by technical team to reduce the potential impacts to air, land, water</p>	<p>USAID will ensure the implementing partners prepare and submit for USAID approval the attached Environmental Review Checklist/ EMMPs. This activity is for small-scale landfills only where activities may include cleaning up surface debris, with no excavated hole or post closure with financing needed. If the activity finds that there is groundwater contamination during the ERC/EMMP with excavation planned in the activity, then this determination would change to a positive determination and a Scoping Statement and Environmental Assessment would be required. If there is no ground water monitoring system a judgement will need to be made on the determination based on the type and amount of materials disposed, the time the materials have been in the illegal landfills, and some site characteristics (soil type, depth to groundwater, etc.)</p>	<p>Negative w/ Conditions or Positive</p>

Component 2 – Private Sector-Led Recycling

Defined/Illustrative Activities	Potential Impacts	Mitigation Measures	Recommended Threshold Determination
2.1 Identify key products, marketing and sales channels, and potential private companies in waste separation and recycling sectors based on the market research conducted by WMTR-I. The program will support cooperation the waste separation and recycling companies with large importers, retailers, manufacturers, hotel chains, etc.	No impacts		Catex
2.2 Identifying key findings, the implementer will work on the national level and with GOG to enhance a recycling business environment in Georgia, and, build advocacy capacity of the Waste Management Association launched with support of WMTR-I program.	No impacts		Catex
2.3 Identify recycling and aggregating companies and assess their business operations, demand and supply, gaps and needs, assist the companies in developing and implementing business plans focused on improving operations, increasing revenues and/or reducing operational costs. Technical assistance, and training in business and management will be provided and business linkages established between waste separations, collection, recycling and aggregating companies.	No impacts		Catex
2.4 Assist aggregating and recycling companies in the deployment of modern and efficient equipment, improving the associated technical skills and introducing effective and efficient production processes to increase the quality of recycled products. Under this component, approximately 15% of the program costs will be spent on sub-grants and sub-contracts that will be cost-shared with recipients.	Inadequate operational procedures can lead to impacts to land and water	USAID will ensure the implementing partners prepare and submit for USAID approval the attached Environmental Review Checklist that will define appropriate EMMPs are developed.	Negative w/ conditions

2.5 Assist recycling companies in the development of marketing plans, and improving marketing and labeling practices for recycled products, which will serve to stimulate the demand on recycled products in Georgia.	No impacts		Catex
2.6 Assist recycling companies in introducing quality control systems. This may include the development of a manual or other tool to ensure product quality before the final products reach the market.	No impacts		Catex
2.7. Assist project stakeholders in developing strategies that ensure equal access and participation of women and men in decision-making and improved waste management practices.	No impacts		Catex

Component 3 – Illegal Dumping Penalties and Tariff Policy

Defined/Illustrative Activities	Potential Impacts	Mitigation Measures	Recommended Threshold Determination
3.1 Work closely with GOG institutions, local and regional authorities to implement Cost Recovery Tariff Methodology prepared by WMTR-I program. The methodology will be tailored to the needs of municipalities and elaborated taking into consideration institutional capacities, socio-economic background, legislation and public awareness.	No impacts		Catex
3.2 Work closely with relevant GOG institutions to strengthen implementation/enforcement of Waste Management Code in action and increase capacity of local municipal authorities to fully execute the new Code.	No impacts		Catex
3.3 Assist the local government to develop systems to ensure proper disposal of waste.	No impacts		Catex

Component 4 – Public Outreach

Defined/Illustrative Activities	Potential Impacts	Mitigation Measures	Recommended Threshold Determination
4.1 Build capacity of all stakeholders involved in supporting recycling, including but not limited to the private sector, local government, and NGOs, to promote the 4Rs - reduce, reuse, repurpose and recycle - attitudes and work towards that change in behavior over time.	No impacts		Catex
4.2 Increase waste management knowledge within communities, women and men, youth groups, and school students to increase awareness of and engage in separation, recycling, and other waste management activities. This will take into account differential impacts of waste management and disposal practices on women and men. The project may consider giving small grants, up to \$600 to implement waste management and recycling campaigns and support activities in their community and/or school.	No impacts		Catex
4.3 Support 4Rs education among school students in target communities.	No impacts		Catex
4.4 Promote the concept and benefits of separation and recycling.	No impacts		Catex
4.5 Involve businesses to advocate and promote waste separation and recycling as a part of their corporate social responsibility.	No impacts		Catex

4.2. Recommended Environmental Determination:

Categorical Exclusions:

A categorical exclusion is recommended for the following identified activities under 22 CFR 216.2(c)(2):

- Activities 1.1, 2.2, 2.5, 2.6, 2.7, 3.2, 3.3, 4.1, 4.2, 4.3, 4.4, 4.5 under §216.2(c)(2)(i) Education, technical assistance, or training programs except to the extent such programs include activities directly affecting the environment (such as construction of facilities, etc.);
- Activity 2.1, 2.3, 3.1 under §216.2(c)(2) (iii) Analyses, studies, academic or research workshops and meetings;

Negative Determination with Conditions:

Under §216.3(a)(2)(iii), a negative determination with conditions is recommended for activities 1.2 and 2.4. Specific terms and conditions are presented below in Section 4.3.

4.3. Terms and Conditions:

- 4.3.1. Prior to initiating activities that have the potential to result in significant adverse environmental, health, and safety impact, the IP shall prepare an ERC/EMMP(s) in the format provided in the Annex 1 of this IEE. The COR/AOR, MEO, and BEO shall approve the ERC/EMMP(s) prior to implementation. For each site-specific activity, the ERC/EMMP shall be attached to the signed *Certification of No Adverse or Significant Effects on the Environment* (See ERC/EMMP Annex 1). This should be signed by the IP, COR/AOR, MEO, and BEO.
- 4.3.2. After the IP has finalized its activities at a specific site, the IP shall sign a *Record of Compliance* with the ERC/EMMP (see ERC/EMMP Annex 2) certifying that the organization met all applicable ERC/EMMP conditions and submit it to the COR/AOR. The COR/AOR shall keep the original for the project files and provide a copy to the MEO and BEO.
- 4.3.3. ERC/EMMPs shall be captured in annual work plans, and therefore budgeted for and reviewed for adequacy at least annually.
- 4.3.4. Changes in activities and their associated ERC/EMMPs shall necessitate amending the IEE or issuing a Memo to the File (depending on extent and potential impact of the changes).

4.4. USAID Monitoring and Reporting

- 4.4.1. The AOR/COR, with the support of the MEO, is responsible for monitoring compliance of activities by means of desktop reviews and site visits.
- 4.4.2. If at any time the project is found to be out of compliance with the IEE, the AOR/COR or MEO shall immediately notify the BEO.
- 4.4.3. A summary report of Mission's compliance relative to this IEE shall be sent to the BEO on an annual basis, normally in connection with preparation of the Mission's annual environmental compliance report required under ADS 203.3.8.5 and 204.3.3.
- 4.4.4. The BEO or his/her designated representative may conduct site visits or request additional information for compliance monitoring purposes to ensure compliance with this IEE, as necessary.

4.5. Implementing Partner (IP) Monitoring and reporting

- 4.5.1. If an individual activity is found to pose significant adverse environmental effects that have not been identified and addressed in the attached EMMP(s), or EMMPs that were subsequently approved for the project, new EMMPs shall be developed to include environmental safeguards for such effects.

- 4.5.2. IPs shall report on environmental compliance requirements as part of their routine project reporting to USAID.

5. Mandatory Inclusion of Requirements in Solicitations, Awards, Budgets and Workplans

- 5.1. Appropriate environmental compliance language, including limitations defined in Section 6, shall be incorporated into solicitations and awards for this activity and projects budgets shall provide for adequate funding and human resources to comply with requirements of this IEE.
- 5.2. Solicitations shall include Statements of Work with task(s) for meeting environmental compliance requirements and appropriate evaluation criteria.
- 5.3. Environmental mitigation and monitoring requirements, when available, shall also be included in solicitations and awards.
- 5.4. The IP shall incorporate conditions set forth in this IEE into their annual work plans.
- 5.5. The IP shall ensure annual work plans do not prescribe activities that are defined as limitations, as defined in Section 6.
- 5.6. The USAID Mission will include an indicator for environmental compliance as part of the project's performance monitoring plan. [If an IEE has a threshold determination of negative determination with conditions, then a possible indicator is if the IP did the ERC/EMMP.]

6. Limitations of the IEE: This IEE does not cover activities (and therefore should changes in scope implicate any of the issues/activities listed below, a BEO-approved amendment shall be required), that:

- 6.1. Normally have a significant effect on the environment under §216.2(d)(1) [See http://www.usaid.gov/our_work/environment/compliance/regulations.html]
- 6.2. Support project preparation, project feasibility studies, engineering design for activities listed in §216.2(d)(1);
- 6.3. Affect endangered species;
- 6.4. Result in wetland or biodiversity degradation or loss;
- 6.5. Support extractive industries (e.g. mining and quarrying);
- 6.6. Promote timber harvesting;
- 6.7. Provide support for regulatory permitting;
- 6.8. Result in privatization of industrial or infrastructure facilities;
- 6.9. Lead to new construction of buildings or other structures;
- 6.10. Assist the procurement (including payment in kind, donations, guarantees of credit) or use (including handling, transport, fuel for transport, storage, mixing, loading, application, cleanup of spray equipment, and disposal) of pesticides or activities involving procurement, transport, use, storage, or disposal of toxic materials and /or pesticides (cover all insecticides, fungicides, rodenticides, etc. covered under the Federal Insecticide, Fungicide, and Rodenticide Act); and
- 6.11. Procure or use genetically modified organisms.

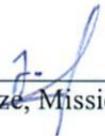
7. Revisions

- 7.1. Under §216.3(a)(9), if new information becomes available that indicates that activities covered by the IEE might be considered major and their effect significant, or if additional activities are proposed that might be considered major and their adverse effect significant, this environmental threshold decision will be reviewed and, if necessary, revised by the Mission with concurrence by the BEO. It is the responsibility of the USAID COR/AOR to keep the MEO and BEO informed of any new information or changes in the activity that might require revision of this IEE.

Recommended Environmental Threshold Decision Clearances:

Approval : 

Douglas H Ball, Mission Director Date 11/18/2016

Clearance: 

Gocha Lobzhanidze, Mission Environmental Officer Date 11.10.16

Clearance : 

Gocha Lobzhanidze, AOR Date 11.10.16

Concurrence: 

Mark Kamiya 11/21/2016
E&E Bureau Environmental Officer Date

Distribution:

IEE File
MEO (to also provide a copy to AOR/COR)



**ENVIRONMENTAL REVIEW CHECKLIST
(ERC) for Identifying Potential Environmental
Impacts of Project Activities and Processes/
ENVIRONMENTAL MITIGATION AND
MONITORING PLAN
(EMMP)
ERC/EMMP**

for [Activity Name]

Implemented under: [*Project Name*]

DCN: [*of Parent IEE*]

Prepared by: [*Implementer*]

ENVIRONMENTAL REVIEW CHECKLIST FOR IDENTIFYING POTENTIAL ENVIRONMENTAL IMPACTS OF PROJECT ACTIVITIES AND PROCESSES

The Environmental Review Checklist for Identifying Potential Environmental Impacts of Project Activities and Processes (ERC) and Environmental Mitigation and Monitoring Plan (EMMP) is intended for use by implementing partners to: assess activity-specific baseline conditions, including applicable environmental requirements; identify potential adverse environmental effects associated with planned activity(s) and processes; and develop EMMPs that can effectively avoid or adequately minimize the identified effects. This ERC/EMMP may be substituted for other ERC/EMMP versions that may have been attached to previous initial environmental examinations (IEE). If implementing partners are in doubt about whether a planned activity requires preparation of an ERC, they should contact their Contracting Officer’s Representative (COR)/Agreement Officer’s Representative (AOR) for clarification. In turn, the COR/AOR should contact their Mission Environmental Officer (MEO) if they have any questions. In special circumstances and with approval of the BEO it is possible to have one very comprehensive ERC/EMMP for multiple projects if they are similar in scope. *(When preparing the ERC/EMMP, please indicate “not applicable” for items that have no bearing on the activity. The ERC/EMMP should be completed by an environmental specialist. **The ERC/EMMP must be completed and approved prior to the activity beginning.**)*

A. Activity and Site Information

Project Name: <i>(as stated in the triggering IEE)</i>	
Mission/Country:	
DCN of Most Recent Triggering IEE or Amendment:	
Activity/Site Name:	
Type of Activity:	
Name of Reviewer and Summary of Professional Qualifications:	
Date of Review:	

B. Activity Description

1. Activity purpose and need
2. Amount of activity
3. Location of activity
4. Beneficiaries, e.g., size of community, number of school children, etc.
5. Number of employees and annual revenue, if this is a business
6. Implementation timeframe and schedule
7. Detailed description of activity, items that will be purchased *(This section should fully describe what funds are being used for.)*

8. Detailed description of site, e.g., size of the facility or hectares of land; steps that will be taken to accomplish the activity;
9. Existing or planned certifications, e.g., ISO 14001 EMS, ISO 9000, HCCP, SA 8000, Global Gap, Environmental Product Declarations, Eco Flower, EcoLogo, Cradle to Cradle, UL Environment, GREENGUARD, Fair Trade, Green Seal, LEED, or various Forest Certifications
10. Site map, e.g., provide an image from Google Earth of the location
11. Photos of site, items to be purchased, engineering construction plans (*when available*)

C. Activity-Specific Baseline Environmental Conditions

1. Population characteristics
2. Geography
3. Natural resources, e.g., nearby forest/protected areas, ground and surface water resources
4. Current land use and owner of land
5. Proximity to public facilities, e.g. schools, hospitals, etc.
6. Other relevant description of current environmental conditions in proximity to the activity

D. Legal, Regulatory, and Permitting Requirements

1. National environmental impact assessment requirements for this activity
2. Applicable National or local permits for this activity, responsible party, and schedule for obtaining them:

Permit Type	Responsible party	Schedule
Zoning		
Building/Construction		
Source Material Extraction		
Waste Disposal		
Wastewater		
Storm Water Management		
Air Quality		
Water Use		
Historical or Cultural Preservation		
Wetlands or Water bodies		
Threatened or Endangered Species		
<i>Other</i>		

3. Additional National, European Union, or other international environmental laws, conventions, standards with which the activity might be required to comply
 - a. Air emission standards
 - b. Water discharge standards
 - c. Solid waste disposal or storage regulations
 - d. Hazardous waste storage and disposal
 - e. Historical or cultural preservation
 - f. *Other*

E. Engineering Safety and Integrity (for Sections E. and F., provide a discussion for any of the listed issues that are yes answers and likely to have a bearing on this activity)

1. Will the activity be required to adhere to formal engineering designs/plans? Have these been or will they be developed by a qualified engineer? If yes, attach the plans to the ERC/EMMP.
2. Do designs/plans effectively and comprehensively address:
 - a. Management of storm water runoff and its effects?
 - b. Reuse, recycling, and disposal of construction debris and by-products?
 - c. Energy efficiency and/or preference for renewable energy sources?
 - d. Pollution prevention and cleaner production measures?
 - e. Maximum reliance on green building or green land-use approaches?
 - f. Emergency response planning?
 - g. Mitigation or avoidance of occupational safety and health hazards?
 - h. Environmental management of mobilization and de-mobilization?
 - i. Capacity of the host country recipient organization to sustain the environmental management aspects of the activity after closure and handover?
3. Are there known geological hazards, e.g., faults, landslides, or unstable soil structure, which could affect the activity? If so, how will the project ensure structural integrity?
4. Will the site require grading, trenching, or excavation? Will the activity generate borrow pits? If so, how will these be managed during implementation and closure?
5. Will the activity cause interference with the current drainage systems or conditions? Will it increase the risk of flooding?
6. Will the activity interfere with above- or below-ground utility transmission lines, e.g., communications, water, sewer, or natural gas?
7. Will the activity potentially interfere with vehicle or pedestrian traffic?
8. Does the activity increase the risk of fire, explosion, or hazardous chemical releases?
9. Does the activity require disposal or retrofitting of polychlorinated biphenyl-containing equipment, e.g., transformers or florescent light ballasts?

F. Environment, Health, and Safety Consequences

1. Potential impacts to public health and well-being

- a. Will the activity require temporary or permanent property land taking?
- b. Will activities require temporary or permanent human resettlement?
- c. Will area residents and/or workers be exposed to pesticides, fertilizer, or other toxic substances, e.g., as a result of farming or manufacturing? If yes, then there should be an approved, current PERSUAP on file and discuss how it will be used in this situation. If so, how will the project:
 - i. Ensure that these chemicals do not contaminate ground or surface water?

- ii. Ensure that workers use protective clothing and equipment to prevent exposure?
 - iii. Control releases of these substances to air, water, and land?
 - iv. Restrict access to the site to reduce the potential for human exposure?
 - d. Will the activity generate pesticide, chemical, or industrial wastes? Could these wastes potentially contaminate soil, groundwater or surface water?
 - e. Will chemical containers be stored at the site?
 - f. Does the activity remove asbestos-containing materials or use of building materials that may contain asbestos, formaldehyde, or other toxic materials? Can the project certify that building materials are non-toxic? If so, how will these wastes be disposed of?
 - g. Will the activity generate other solid or hazardous wastes such as construction debris, dry or wet cell batteries, florescent tubes, aerosol cans, paint, solvents, etc.? If so, how will this waste be disposed of?
 - h. Will the activity generate nontoxic, nonhazardous solid wastes (subsequently requiring land resources for disposal)?
 - i. Will the activity pose the need to handle and dispose of medical wastes? If so, describe measures of ensuring occupational and public health and safety, both onsite and offsite.
 - j. Does the activity provide a new source of drinking water for a community? If so, how will the project monitor water quality in accordance with health standards?
 - k. Will the activity potentially disturb soil contaminated with toxic or hazardous materials?
 - l. Will activities, e.g., construction, refurbishment, demolition, or blasting, result in increased noise or light pollution, which could adversely affect the natural or human environment?
- 2. Atmospheric and air quality impacts**
- a. Will the activity result in increased emission of air pollutants from a vent or as fugitive releases, e.g., soot, sulfur dioxide, oxides of nitrogen, volatile organic compounds, methane.
 - b. Will the activity involve burning of wood or biomass?
 - c. Will the activity install, operate, maintain, or decommission systems containing ozone depleting substances, e.g., freon or other refrigerants?
 - d. Will the activity generate an increase in carbon emissions?
 - e. Will the activity increase odor and/or noise?
- 3. Water quality changes and impacts**
- a. *How far is the site located from the nearest river, stream, or lake?(Non-yes/no question)*
 - b. Will the activity disturb wetland, lacustrine, or riparian areas?
 - c. *What is the depth to groundwater at the site? (Non-yes/no question)*
 - d. *Will the activity result in increased ground or surface water extraction? If so, what are the volumes? Permit requirements? (Non-yes/no question)*

- e. Will the activity discharge domestic or industrial sewage to surface, ground water, or publicly-owned treatment facility?
- f. Does the activity result in increased volumes of storm water run-off and/or is there potential for discharges of potentially contaminated (including suspended solids) storm water?
- g. Will the activity result in the runoff of pesticides, fertilizers, or toxic chemicals into surface water or groundwater?
- h. Will the activity result in discharge of livestock wastes such as manure or blood into surface water?
- i. Does the site require excavation, placing of fill, or substrate removal (e.g., gravel) from a river, stream or lake?

4. Land use changes and impacts

- a. Will the activity convert fallow land to agricultural land?
- b. Will the activity convert forest land to agricultural land?
- c. Will the activity convert agricultural land to commercial, industrial, or residential uses?
- d. Will the activity require onsite storage of liquid fuels or hazardous materials in bulk quantities?
- e. Will the activity result in natural resource extraction, e.g., granite, limestone, coal, lignite, oil, or gas?
- f. Will the activity alter the viewshed of area residents or others?

5. Impacts to forestry, biodiversity, protected areas and endangered species

- a. Is the site located adjacent to a protected area, national park, nature preserve, or wildlife refuge?
- b. Is the site located in or near threatened or endangered (T&E) species habitat? Is there a plan for identifying T&E species during activity implementation? If T&E species are identified during implementation, is there a formal process for halting work, avoiding impacts, and notifying authorities?
- c. Is the site located in a migratory bird flight or other animal migratory pathway?
- d. Will the activity involve harvesting of non-timber forest products, e.g., mushrooms, medicinal and aromatic plants (MAPs), herbs, or woody debris?
- e. Will the activity involve tree removal or logging? If so, please describe.

6. Historic or cultural resources

- a. Are there cultural or historic sites located at or near the site? If so, what is the distance from these? What is the plan for avoiding disturbance or notifying authorities?
- b. Are there unique ethnic or traditional cultures or values present in the site? If so, what is the applicable preservation plan?

G. Further Analysis of Recommended Actions *(Most activities will have a threshold determinations of negative determination with conditions..)*

1. Categorical Exclusion: The activity is not likely to have an effect on the natural or physical environment. No further environmental review is required.* (This is rarely used in the ERC/EMMP.)

2. Negative Determination with Conditions: The activity does not have potentially significant adverse environmental, health, or safety effects, but may contribute to minor impacts that can be eliminated or adequately minimized by appropriate mitigation measures. ERC/EMMPs shall be developed, approved by the Mission Environmental Officer (MEO) and the BEO **prior to beginning the activity**, incorporated into workplans, and then implemented. For activities related to the procurement, use, or training related to pesticides, a PERSUAP will be prepared for BEO approval; PERSUAPS are considered amendments to the IEE and usually Negative Determination with Conditions. See Sections H and I below.*

3. Positive Determination: The activity has potentially significant adverse environmental effects and requires further analysis of alternatives, solicitation of stakeholder input, and incorporation of environmental considerations into activity design. A Scoping Statement (SS) must be prepared and be submitted to the BEO for approval. Following BEO approval of the SS an Environmental Assessment (EA) will be conducted. The activity may not be implemented until the BEO clears the final EA. If the Parent IEE does not have Positive Determination as one of the threshold determinations, the IEE needs to be amended.

4. Activity Cancellation: The activity poses significant and unmitigable adverse environmental effects. Adequate ERC/EMMPs cannot be developed to eliminate these effects and alternatives are not feasible. The project is not recommended for funding.

***Note regarding applicability related to Pesticides (216.2(e):** The exemptions of §216.2(b)(1) and the categorical exclusions of §216.2(c)(2) *such as technical assistance, education, and training* are not applicable to assistance for the procurement or use of pesticides.

H. EMMPs (*Using the format provided below list the processes that comprise the activity, then for each, identify impacts requiring further consideration, and for each impact describe the mitigation and monitoring measures that will be implemented to avoid or adequately minimize the impacts. All environment, health, and safety impacts requiring further consideration, which were identified in Section F., should be addressed*)

1. Activity-specific environmental mitigation plan (Upon request, the MEO may be able to provide your project with example EMMPs that are specific to your activity.)

Processes	Identified Environmental Impacts	Do the Impacts Require Further Consideration?	Mitigation Measures	Monitoring Indicators
List all the processes that comprise the activity(s) (e.g. asbestos roof removal,	A single process may have several potential impacts— provide a separate line for each.	For each impact, indicate Yes or No ; if No , provide justification, e.g.,: (1) There are no applicable legal requirements including permits or reporting and (2) There is no	For each impact requiring further consideration, describe the mitigation measures that will avoid or adequately minimize the impact. (If	Specify indicators to (1) determine if mitigation is in place and (2) successful. For example, visual inspections for

Processes	Identified Environmental Impacts	Do the Impacts Require Further Consideration?	Mitigation Measures	Monitoring Indicators
<i>installation of toilets, remove and replace flooring) A line should be included for each process.</i>		<i>relevant community concern and (3) Pollution prevention is not feasible or practical and (4) Does not pose a risk because of low severity, frequency, or duration</i>	<i>mitigation measures are well-specified in the IEE, quote directly from IEE.)</i>	<i>seepage around pit latrine; sedimentation at stream crossings, etc.)</i>

2. Activity-specific monitoring plan

Monitoring Indicators	Monitoring and Reporting Frequency	Responsible Parties	Records Generated
<i>Specify indicators to (1) determine if mitigation is in place and (2) successful (for example, visual inspections for seepage around pit latrine; sedimentation at stream crossings, etc.)(Taken from column 5 of the environmental mitigation plan above.)</i>	<i>For example: “Monitor weekly, and report in quarterly reports. If XXX occurs, immediately inform USAID COR/AOR.”</i>	<i>Separate parties responsible for mitigation from those responsible for reporting, whenever appropriate,</i>	<i>If appropriate, describe types of records generated by the mitigation, monitoring, and reporting process.</i>

ERC/EMMP ANNEX 1

Certification of No Adverse or Significant Effects on the Environment

I, the undersigned, certify that activity-specific baseline conditions and applicable environmental requirements have been properly assessed; environment, health, and safety impacts requiring further consideration have been comprehensively identified; and that adverse impacts will be effectively avoided or sufficiently minimized by proper implementation of the EMMP(s) in Section H. If new impacts requiring further consideration are identified or new mitigation measures are needed, I will be responsible for notifying the USAID COR/AOR, as soon as practicable. Upon completion of activities, I will submit a **Record of Compliance with Activity-Specific EMMPs** using the format provided in ERC Annex 2.

Implementer Project Director/COP Name

Date

Approvals:

USAID COR/AOR Name

Date

Mission Environmental Officer Name

Date

Concurrence:

Mark Kamiya, Bureau Environmental Officer

Date

Distribution:

- Project Files
- IEE Files

Mission / Project

**ERC/EMMP ANNEX 2
RECORD OF COMPLIANCE WITH ACTIVITY-SPECIFIC
ENVIRONMENTAL MITIGATION AND MONITORING PLANS (EMMPs)**

Subject:	<i>Site or Activity Name/Primary Project</i>
IEE DCN:	
To:	<i>COR/AOR/Activity Manager Name</i>
Copy:	<i>Mission Environmental Officer Name</i>
Date:	

The *[name of the implementing organization]* has finalized its activities at the *[site name]* to *[describe activities and processes that were undertaken]*. This memorandum is to certify that our organization has met all conditions of the EMMPs for this activity. A summary and photo evidence of the how mitigation and monitoring requirements were met is provided below.

1. Mobilization and Site Preparation
2. Activity Implementation Phase
3. Site Closure Phase
4. Activity Handover

Sincerely,

Implementer Project Director/COP Name

Date

Approved:

USAID/COR/AOR/Activity Manager Name

Date

Distribution:

- Project Files
- MEO
- Bureau Environmental Officer