USAID | SOUTHERN AFRICA
FROM THE AMERICAN PEOPLE

Environmental Mitigation and Monitoring Plan (EMMP)

Resilience in the Limpopo Basin Program (RESILIM)

September 2013
This publication was produced for review by the United States Agency for International Development.
It was prepared by Chemonics International Inc.

CONTENTS

ACRONYMS

BMP	best management practices
CBNRM	community-based natural resource management
EGSSAA	USAID environmental guidelines for small-scale activities in Africa
EMMP	environmental mitigation and monitoring plan
ERR	environmental review report
ESF	environmental screening form
GCC	global climate change
IEE	initial environmental evaluation
IPM	integrated pest management
LIMCOM	Limpopo Watercourse Commission
RESILIM	resilience in the Limpopo basin program
SADC	Southern Africa development community
SAF	strategic activity fund

RESILIM and Environmental Compliance

The Environmental Mitigation and Monitoring Plan (EMMP) for the Resilience in the Limpopo Basin Program (RESILIM) responds to the requirements described in RESILIM's Initial Environmental Examination (USAID-SA_RESILIM_IEE_042512), and supports the project work plans. It is intended to cover the life of the project, but will be amended and/or updated to cover project activities not covered therein, if and when deemed necessary.

A. RESILIM Environmental Mitigation Approach

The USAID/Southern Africa funded Resilience in the Limpopo Basin (RESILIM) project, which commenced operation in June 2012, seeks to improve the transboundary water resources management of the Limpopo River, improving the resilience of communities and ecosystems, particularly with regard to climate change adaptation. It operates in support of the Southern Africa Development Community (SADC) Climate Change Adaptation Strategy and the SADC Revised Protocol on Shared Watercourses.

The vast majority of activities proposed under RESILIM present no potential for adverse impacts on the environment. However, other activities, for example those that will pilot climate change adaptation strategies and implement new natural resource management practices, may have a potential for negative impacts on the physical environment. A negative determination with conditions is recommended for these activities.

This EMMP describes RESILIM's mitigation and monitoring plan for activities that fall into the *negative determination with conditions* category. We will conduct an environmental screening using the checklist attached to RESILIM's IEE in order to identify and assess potential environmental impacts with a view to eliminate or reduce them through appropriate mitigation measures and monitoring protocols. The environmental review plan will provide for ensuring environmental compliance, and protecting the health of the environment and population.

RESILIM will include environmental compliance language in all of its solicitations and awards, and will encourage partner organizations to adopt environmentally-safe processes and practices, and incorporate appropriate environmental analyses in their development planning processes. It will also contribute to building partner organizations' capacity to implement the EMMP recommendations, and monitor the impact and effectiveness of the mitigation measures. As appropriate, RESILIM will adhere to the relevant guidelines set forth in USAID Environmental Guidelines for Small-Scale Activities in Africa (EGSSAA), namely chapter 2 "community-based natural resource management" (CBNRM) and chapter 3 "small-scale construction".

In collaboration with the technical staff of the partner organizations, the RESILIM team will monitor environmental compliance in accordance with the EMMP and the IEE recommended environmental threshold decision. The environmental monitoring results will be included in the project reports.

The RESILIM DCOP will serve as the designated environmental compliance coordinator. She/He will oversee the implementation of the EMMP in close collaboration with RESILIM

technical coordination specialists, and with short-term technical support from Chemonics' home office environmental team. The RESILIM field staff, including the M&E specialist, will receive appropriate training in environmental compliance in order to facilitate and support environmental mitigation monitoring.

Activities not specifically identified in this EMMP, including those funded under the grants fund as well subcontracts, will be subject to an environmental screening, using the Environmental Screening Form (ESF) in Annex A in order to ensure compliance to USAID environmental regulations, and protect the environment and human health.

RESILIM will take steps to avoid the potential negative impact by:

- Promoting the best practice guidance for community-based natural resource management found in the *Environmental Guidelines for Small Scale Activities in Africa* (www.encapafrica.org);
- Providing training to implementing partners in using the environmental screening for all relevant project activities, implementing the mitigation measures, monitoring their impact, and preparing the relevant mitigation and monitoring report;
- Securing appropriate local community's and authorities' commitment, and contributing to strengthening their capacity to carry out the project activities;
- Promoting effective resource monitoring and policing;
- Assisting in clarifying the relevant legal, regulatory and administrative frameworks;
- Promoting adaptive management;
- Facilitating appropriate information and knowledge sharing; and
- Ensuring local active participation at all levels.

B. Reporting

RESILIM will monitor environmental compliance with the IEE recommended threshold determinations and the EMMP mitigation measures. Its quarterly and annual progress reports will include an environmental compliance and monitoring section which will describe RESILIM's successes, failures, and experiences in implementing the mitigation measures, as well as their general impacts.

C. Environmental Mitigation and Monitoring Plan

The table below describes the mitigation and monitoring plan for RESILIM activities that fall into the **negative determination with conditions** category.

Table 1. Environmental Mitigation and Monitoring Plan

Activities	Potential Adverse Impacts	Mitigation measure(s)	Monitoring indicator(s)	Monitoring and Reporting Frequency	Estimated Costs	Persons Responsible
Demonstrate climate change adaption strategies in critical biodiversity areas. Support community- based pilots to test adaptation strategies that promote innovative approaches to water Management. Develop adaptation projects of scale. Support sub-catchment CBNRM and co-management interventions that mitigate threats to biodiversity	The delivery of Global Climate Change adaptation measures may have biophysical impact, due to the fragility of the ecosystems and their vulnerable to climatic shocks.	Once the activities are identified, RESILIM shall conduct an ESF/ERR screening to determine their level of impacts and appropriate mitigation measures. Sector-specific practice guidelines for CBNRM and forestry found in the EGSSAA shall be used. Training shall be provided as necessary to implementing partners in the preparation, implementation, and reporting of project activities mitigation and monitoring efforts.	Project documents and materials with Best Management Practices (BMP) and environmentally sound climate change adaptation measures and recommendations ESF/ERR reports on proposed activities	Quarterly	$3 million	COP, DCOP, Chief Scientist, M&E Specialist
Strengthen LIMCOM and other Limpopo River Basin management authorities for improved basin-scale planning, biodiversity conservation, and water resources management	By themselves, these capacity building project activities are expected to be positive for the environment, nevertheless some of the resulting activities could lead to negative impact to human health, the environment and /or fragile ecosystems if they fail to incorporate environmental concerns.	Capacity building activities shall include a strong focus on the implementation of best management practices, and environmentally sound resources management. The Environmental Screening Form (ESF) shall be used to analyze the potential impacts before initiating the activities. Based on the ESF reports: • If the proposed activity will not result in potential impact, no further action is required; • If there are little potential for adverse impact, mitigation measures will be incorporated in the design. Specific mitigations measures recommended in this EMMP shall be selected. • If there are potential for substantial but mitigatable adverse environmental effects, and if the proposed activity does not fit well under recommended mitigating measures, the EMMP will be revised to recommend the appropriate mitigation measures.	Project documents and materials with Best Management Practices (BMP) and environmentally sound climate change adaptation measures and recommendations ESF/ERR reports on proposed activities	Quarterly	$500,000	COP, DCOP, Chief Scientist, M&E Specialist

Activities	Potential Adverse Impacts	Mitigation measure(s)	Monitoring indicator(s)	Monitoring and Reporting Frequency	Estimated Costs	Persons Responsible
Develop public-private partnerships that leverage resources outside of RESILIM in order to pursue shared goals	Potential impact to the biological, physical and social environment depending on activities implemented with the leveraged funds.	If the proposed activity is already covered under the IEE and the EMMP, the relevant mitigation measures shall apply. Otherwise the ESF/ERR process will be used to analyze its potential impacts. Based on the ESF reports: • If the proposed activities will not result in potential impact, no further action is required; • If there are little potential for adverse impact, mitigation measures will be incorporated in the design. Specific mitigations measures recommended in this EMMP will be selected. • If there are potential for substantial but manageable adverse environmental effects, and if the proposed activity does not fit well under recommended mitigating measures, the EMMP will be revised to recommend the appropriate mitigation measures. If the planned activities include the rehabilitation of existing facilities, and/or construction of new facilities in which the total surface area disturbed is less than 10,000 square feet, RESILIM shall implement the relevant mitigation measures for environmentally sound construction, as provided in Chapter 3: Small Scale Construction of the USAID Environmental Guidelines for Small-scale Activities in Africa (EGSSAA) http://www.encapafrica.org/SmallScaleGuidelines.htm. If the proposed activity is not covered under the IEE, an amendment to the IEE will be called for before activities can begin.	Project documents and materials with Best Management Practices (BMP) and environmentally sound climate change adaptation measures and recommendations ESF/ERR reports on proposed activities	Quarterly	$300,000	Partnerships Advisor, COP
Restoration of degraded areas, including coastal mangrove systems	Loss of forest ecosystem quality due to: • Misunderstanding of the potential returns from natural forest management; and • Lack of community inclusiveness that leaves out certain segments of society, e.g., women, herders. Unintended changes in land use or shifting of use pressures to other areas through: Treating the symptoms rather than the causes of degradation Misguided incentive or subsidy programs	The Environmental Screening Form (ESF) in Annex A shall be used to analyze the potential impacts of the activities before initiating them. Based on the ESF reports: • If the proposed activity will not result in potential impact, no further action is required; • If there are little potential for adverse impact, mitigation measures will be incorporated in the design. Specific mitigations measures recommended in this EMMP shall be selected. • If there are potential for substantial but mitigatable adverse environmental effects, and if the proposed activity does not fit well under recommended mitigating measures, the EMMP will be revised to recommend the appropriate mitigation measures.	Project documents and materials with Best Management Practices (BMP) and environmentally sound climate change adaptation measures and recommendations ERR reports on proposed activities, including reporting on siting of program, use of indigenous species, and rights of local people are recognized and respected. Reforestation plan/strategy developed. Plan should be appropriate to the scale and intensity of operations, written, implemented and kept up to date. The	At least quarterly, with monitoring at a minimum at site selection and after planting stages	$150,000	Chief Scientist, DCOP, short-term IWRM Specialist

Activities	Potential Adverse Impacts	Mitigation measure(s)	Monitoring indicator(s)	Monitoring and Reporting Frequency	Estimated Costs	Persons Responsible
		RESILIM shall implement the relevant mitigation measures for environmentally sound construction, as provided in Chapter 2: Community-based Natural Resources Management of the USAID Environmental Guidelines for Small-scale Activities in Africa (EGSSAA) found at http://www.encapafrica.org/EGSSAA/Word_English/cbnrm.doc. It shall also apply guidelines such as: • Improved integrated program planning, resource assessments and site stratification • Recognition of the legal and customary rights of indigenous peoples to own, use and manage their lands, territories and resources • Promotion of values and methods of natural forest management • Utilization of native species • Enhanced national government's capabilities for land-use planning	long-term objectives of management, and the means of achieving them, shall be clearly stated			
	Unsafe or unauthorized agrochemical use in seedling nurseries through: Failure to carry out environmental assessment of pesticide use Poorly trained staff or participants Improper storage or disposal of chemicals or byproducts	Fertilizers shall be thoughtfully employed according to best practice and labels recommendations. Integrated soil fertility management shall be promoted, within the context of the prevailing biophysical and socio-economic conditions, as well as the desired outcomes. RESILIM shall promote practices the production and use of compost in order to reduce the use of chemical fertilizers in the nurseries. RESILIM support for the promotion, procurement and use of pesticides and pesticides treated products shall comply with the conditions and guidance of the relevant PERSUAP or to USAID prior review and approval. Good guidance for IPM can be found in Chapter 12.1: Pest Management I in USAID Africa Bureau Environmental Guidelines for Small-Scale Activities in Africa EGSSAA http://www.encapafrica.org/EGSSAA/Word_English/ipm.doc. Specific potential mitigation measures include: • Greater reliance on IPM solutions for pest problems • Improving training packages and pesticide handling guidelines • Training and fielding para-technicians from within farmer community to advise peers • Development of national agro-chemical use guidelines that include forest nurseries	Project documents and materials with Best Management Practices (BMP) and environmentally sound climate change adaptation measures and recommendations ERR reports on proposed activities describing the nursery practices.	At least quarterly, with monitoring at a minimum visit to nursery site	$50,000	COP, Chief Scientist, short-term IWRM specialist, DCOP

Annex A

Environmental Screening Form (ESF) for RESILIM Natural Resource Activities

This supplement provides additional questions to ascertain whether these proposed activities should be categorized as "very low risk:"

- If the answers to ALL the questions that follow are "NO," then the proposed natural resource-based activity is considered "very low risk."
- If the answer to ANY question is "YES," the activity CANNOT be considered "very low risk" and an Environmental Review Form (ERF), and potentially an ERR, is required.

Screening criteria

Will the activities…	**YES**	**NO**
Natural Resources		
Accelerate erosion by water or wind?		
Reduce soil fertility and/or permeability?		
Alter existing stream flow, reduce seasonal availability of water resources?		
Potentially contaminate surface water and groundwater supplies?		
Involve the extraction of renewable natural resources?		
Lead to unsustainable use of renewable natural resources such as forest products?		
Involve the extraction of non-renewable natural resources?		
Restrict customary access to natural resources?		
Reduce local air quality through generating dust, burning of wastes or using fossil fuels and other materials in improperly ventilated areas?		
Affect dry-season grazing areas and/or lead to restricted access to a common resource?		
Lead to unsustainable or unnecessarily high water extraction and/or wasteful use?		
Ecosystems and Biodiversity		
Drain wetlands, or be sited on floodplains?		
Harvest wetland plant materials or utilize sediments of bodies of water?		
Lead to the clearing of forestlands for agriculture, the over-harvesting of valuable forest species?		
Promote in-forest bee keeping?		
Lead to increased hunting, or the collection of animals or plant materials?		
Increase the risks to endangered or threatened species?		
Introduce new exotic species of plants or animals to the area?		
Lead to road construction or rehabilitation, or otherwise facilitate access to fragile areas (natural woodlands, wetlands, erosion-prone areas)?		
Cause disruption of wildlife migratory routes?		
Agricultural and Forestry Production		
Have an impact on existing or traditional agricultural production systems by reducing seed availability or reallocating land for other purposes?		
Lead to forest plantation harvesting without replanting, the burning of		

Will the activities…	YES	NO
pastureland, or a reduction in fallow periods?		
Affect existing food storage capacities by reducing food inventories or encouraging the incidence of pests?		
Affect domestic livestock by reducing grazing areas, or creating conditions where livestock disease problems could be exacerbated?		
Involve the use of insecticides, herbicides and/or other pesticides?		
Community and Social Issues		
Have a negative impact on potable water supplies?		
Encourage domestic animal migration through natural areas?		
Change the existing land tenure system?		
Have a negative impact on culturally important sites in the community?		
Increase in-migration to the area?		
Create conditions that lead to a reduction in community health standards?		
Lead to the generation of non-biodegradable waste?		
Involve the relocation of the local community?		
Potentially cause or aggravate land-use conflicts?		

I, the undersigned, certify that the information on this form is correct and complete.

(Signature)_____ (Date) _____

(Print name) _____ (Title) _____

Annex B

Instructions for Environmental Review Form (ERF)

Step 1. Provide requested "Applicant information" **(Section A of the ERF)**

Step 2. List all proposed activities

In Section B of the form, list all proposed activities. Include all phases: Planning, design, construction, operation & maintenance. (These are activities that are required to build or operate the primary activity. Examples include building or improving a road so that heavy vehicles can reach the project site, excavation of fill material or gravel for construction, provision of electricity, water, or sewage facilities, disposal of solid waste, etc.)

Step 3a. Screening: Identify low-risk and high-risk activities

For *each* activity you have listed in Section B of the form, refer to the list below to determine whether it is a listed low-risk or high-risk activity.

If an activity is specifically identified as "very low risk" or "high risk" in the list below, indicate this in the "screening result" column in Section B of the form.

Very low-risk activities (Activities with low potential for adverse biophysical or health impacts; including §216.2(c)(2))
Provision of education, technical assistance, or training. (Note that activities directly affecting the environment. do not qualify.) **Community awareness** initiatives. **Controlled agricultural experimentation** exclusively for the purpose of research and field evaluation confined to small areas (normally under 4 ha./10 acres). This must be carefully monitored and no protected or other sensitive environmental areas may be affected). **Technical studies and analyses** and other information generation activities not involving intrusive sampling of endangered species or critical habitats. **Document or information transfers**. **Nutrition, health care or family planning**, EXCEPT when (a) some included activities could directly affect the environment (construction, water supply systems, etc.) or (b) biohazardous (esp. HIV/AIDS) waste is handled or blood is tested. **Small-scale construction.** Construction or repair of facilities if total surface area to be disturbed is under 10,000 sq. ft. (approx. 1,000 sq. m.) (and when no protected or other sensitive environmental areas could be affected). **Intermediate credit.** Support for intermediate credit arrangements (when no significant biophysical environmental impact can reasonably be expected). **Maternal and child feeding** conducted under Title II of Public Law 480. **Title II Activities.** Food for development programs under Title III of P.L. 480, when no on-the-ground biophysical interventions are likely. **Capacity for development.** Studies or programs intended to develop the capability of recipients to engage in development planning. (Does NOT include activities directly affecting the environment) **Small-scale Natural Resource Management activities** for which the answer to ALL SUPPLEMENTAL SCREENING QUESTIONS (see *Natural Resources supplement*) is "NO."

High-risk activities (Activities with high potential for adverse biophysical or health impacts; including §216.2(d)(1))
River basin development **New lands development** **Planned resettlement** of human populations. **Penetration road building, or rehabilitation** of roads (primary, secondary, some tertiary) over 10 km length, and any roads which may pass through or near relatively undegraded forest lands or other sensitive ecological areas **Substantial piped water supply and sewerage** construction. **Major bore hole or water point construction.** **Large-scale irrigation; Water management structures** such as dams and impoundments **Drainage of wetlands** or other permanently flooded areas. **Large-scale agricultural mechanization.** **Agricultural land leveling.** **Procurement or use of <u>restricted use</u> pesticides**, or wide-area application in non-emergency conditions under non-supervised conditions. (Consult MEO.) **Light industrial plant production or processing** (e.g., sawmill operation, agro-industrial processing of forestry products, tanneries, cloth-dying operations).
High Risk and typically not funded by USAID
Actions affecting protected areas and species. Actions determined likely to significantly degrade protected areas, such as introduction of exotic plants or animals. Actions determined likely to jeopardize threatened & endangered species or adversely modify their habitat (esp. wetlands, tropical forests) **Activities in forests, including:** ▪ **Conversion of forest lands** to rearing of livestock ▪ **Planned colonization of forest** lands ▪ **Procurement or use of timber harvesting equipment** ▪ **Commercial extraction of timber** ▪ **Construction of dams** or other water control structures that flood relatively undegraded forest lands **Construction, upgrading or maintenance of roads** that pass through relatively non-degraded forest lands. (Includes temporary haul roads for logging or other extractive industries)

(This list of activities is taken from the text of 22 CFR 216 and other applicable laws, regulations and directives)

Step 3b. Identifying activities of unknown or moderate risk.

All activities NOT identified as "very low risk" or "very high risk" are considered to be of "unknown or moderate risk." Common examples of moderate-risk activities are given in the table below.

Check "moderate or unknown risk" under screening results in Section B of the form for ALL such activities.

Common examples of moderate-risk activities If ANY of the activities listed in this table may adversely impact (1) protected areas, (2) other sensitive environmental areas, or (3) threatened and endangered species and their habitat, THEY ARE NOT MODERATE RISK. All such activities are HIGH RISK ACTIVITIES.	
Small-scale agriculture, NRM, sanitation, etc. **Agricultural experimentation.** Controlled and carefully monitored agricultural experimentation exclusively for the purpose of research and field evaluation of MORE than 4 ha. **NOTE Biotechnology/GMOs:** No *biotechnology testing or release* of any kind are to take place within an assisted country until the host countries involved have drafted and *approved* a regulatory framework governing biotechnology and biosafety. All USAID-funded interventions which involve biotechnologies are to be informed by the ADS 211 series governing "Biosafety Procedures for Genetic Engineering Research". In particular this guidance details the required written approval procedures needed before transferring or releasing GE products to the field. **Medium-scale construction.** Construction or rehabilitation of facilities or structures in which the surface area to be disturbed exceeds 10,000 sq. ft (1000 sq meters) but funding level is $200,000 or less. (E.g. small warehouses, farm packing sheds, agricultural trading posts, produce market centers, and community training centers.) **Rural roads.** Construction or rehabilitation of rural roads meeting the following criteria: ▪ Length of road work is less than ~10 km ▪ No change in alignment or right of way ▪ Ecologically sensitive areas are at least 100 m away fr om the road and not affected by construction or changes in drainage. ▪ No protected areas or relatively undegraded forest are within 5 km of the road. **Title II & III Small-Scale Infrastructure.**	**Sampling.** Technical studies and analyses or similar activities that could involve intrusive sampling, of endangered species or critical habitats. (Includes aerial sampling.) **Water provision/storage.** Construction or rehabilitation of small-scale water points or water storage devices for domestic or non-domestic use. Water points must be located where no protected or other sensitive environmental areas could be affected. **NOTE**: USAID guidance on water quality requires testing for arsenic, nitrates, nitrites and coliform bacteria. **Support for intermediate credit institutions** when indirect environmental harm conceivably could result. **Institutional support grants to NGOs/PVOs** when the activities of the organizations are known and may reasonably have adverse environmental impact. **Pesticides. .**Small-scale use of USEPA-registered, least-toxic general-use pesticides. Use must be limited to NGO-supervised use by farmers, demonstration, training and education, or emergency assistance. **NOTE**: Environmental review (see step 5) must be carried out consistent with USAID Pesticide Procedures as required in Reg. 16 [22 CFR 216.3(b)(1)]. **Nutrition, health care or family planning**, if (a) some included activities could directly affect the environment (e.g., construction, supply systems, etc.) or (b) biohazardous healthcare waste (esp. HIV/AIDS) is produced, syringes are used, or blood is tested.

Common examples of moderate-risk activities If ANY of the activities listed in this table may adversely impact (1) protected areas, (2) other sensitive environmental areas, or (3) threatened and endangered species and their habitat, THEY ARE NOT MODERATE RISK. All such activities are HIGH RISK ACTIVITIES.	
Food for Development programs under Title II or III, involving small-scale infrastructure with the known potential to cause environmental harm (e.g., roads, bore holes). **Quantity imports of commodities such as fertilizers**	

Step 4. Determine if you must write an Environmental Review Report

Examine the "screening results" from section B of the form.

i. If ALL the activities are "very low risk," then no further review is necessary. In Section C of the form, check the box labeled "very low risk activities." Skip to Step 8 of these instructions.
ii. If ANY activities are "unknown or moderate risk," you MUST complete an ENVIRONMENTAL REVIEW REPORT addressing these activities. Proceed to Step 5.
iii. If ANY activities are "high risk," note that USAID's regulations usually require a full environmental assessment study (EA). Because these activities are assumed to have a high probability of causing significant, adverse environmental impacts, they are closely scrutinized. *Any* proposed high-risk activity should be discussed in advance with USAID. In some cases, it is possible that reasonable, achievable mitigation and monitoring can reduce or eliminate likely impacts so that a full EA will not be required. If the applicant believes this to be the case, the Environmental Review Report must argue this case clearly and thoroughly. Proceed to Step 5.

Step 5. Write the Environmental Review Report, if required

The Environmental Review Report presents the environmental issues associated with the proposed activities. It also documents mitigation and monitoring commitments. Its purpose is to allow the applicant and USAID to evaluate the likely environmental impacts of the project.

For a single, moderate risk activity, the Environmental Review Report is typically a SHORT 2-3 page document. The Report will typically be longer for (1) activities of high or unknown risk, and (2) when a number of impacts and mitigation measures are being identified and discussed.

The Environmental Review Report follows the outline below.

A. **Summary of Proposal.** Very briefly summarize background, rationale and outputs/results expected. (Reference proposal, if appropriate).

B. **Description of Activities.** For all moderate and high-risk activities listed in Section B of the ERF, succinctly describe location, siting, surroundings (include a map, even a sketch map). Provide both quantitative and qualitative information about actions needed during

all project phases and who will undertake them. (All of this information can be provided in a table). If various alternatives have been considered and rejected because the proposed activity is considered more environmentally sound, explain these.

C. **Environmental Situation & Host Country Requirements.** Describe the environmental characteristics of the site(s) where the proposed activities will take place. Focus on site characteristics of concern—e.g., water supplies, animal habitat, steep slopes, etc. With regard to these critical characteristics, is the environmental situation at the site degrading, improving, or stable?

In this section, also note applicable host country environmental regulations and/or policies. (For example, does the project require host country environmental review or permitting? Building approval?)

D. Evaluation of Activities and Issues with Respect to Environmental Impact Potential. Include impacts that could occur before construction starts, during construction and during operation, as well as any problems that might arise with abandoning, restoring or reusing the site at the end of the anticipated life of the facility or activity.
Explain direct, indirect, induced and cumulative effects on various components of the environment (e.g. air, water, geology, soils, vegetation, wildlife, aquatic resources, historic, archeological or other cultural resources, people and their communities, land use, traffic, waste disposal, water supply, energy, etc.)

E. Environmental Mitigation Actions (including monitoring). Provide a workplan and schedule identifying the following:
Mitigation Measures. Identify the means taken to avoid, reduce or compensate for impacts. (For example, restoration of borrow of quary areas, replanting of vegetation, compensation for any relocation of homes and residents.) If standard mitigation or best practice guidance exists and is being folloed, cite this guidance. *For guidance, refer to Africa Bureau's Environmental Guidelines for Small-Scale Activities; available at www.encapafrica.org/egssaa.htm.*
Monitoring. Indicate how mitigation measures will be monitored to ensure that they accomplish their intended result. If some impacts are uncertain, describe the monitoring which will be conducted to identify and respond to these potential impacts.
Responsible Parties. Identify who will undertake mitigation and who will conduct the monitoring and at what frequency.
Other Information. Where possible and as appropriate, include photos of the site and surroundings, maps, and list the manes of any reference materials or individuals consulted. (Pictures and maps of the site can substantially reduce the written description required in parts B & C.
A sample Environmental Mitigation Plan and Report (EMPR) is provided in Annex 4 which provides an outline and meets the requirements of the ERR

Step 6. Based on the environmental screening, reach a recommended determination for each high-risk or unknown/moderate-risk activity

For each high-risk or unknown/moderate- risk activity, the environmental screening will help you decide between one of the recommended determinations:

- **No significant adverse impacts**. The activity in question will not result in significant. Adverse environmental impacts. Special mitigation or monitoring is not required. Typically, this conclusion is not appropriate for high-risk activities.
- **No significant adverse impacts given specified mitigation and monitoring**. With mitigation and monitoring as specified in the Environmental Review Report, the activities in question will not result in significant adverse environmental impacts.
- **Significant adverse impacts .**The activity in question is likely to cause significant adverse environmental impacts and cannot be mitigated with best practices or other measures. A full environmental assessment will be required.

For each high-risk or unknown/moderate-risk activity, indicate your "recommended determination" in Section B of the form

Step 7. Summarize recommended determinations

In section C of the form, summarize your recommended determinations by checking ALL categories indicated in Table I.

Step 8. Sign certifications (Section D of form)

Step 9. Submit form to USAID project officer

Attach ERR, if any.

Annex C

Environmental Review Form (ERF)

A. Applicant information

Organization	Parent grant or project
Individual contact and title	Address, phone & email (if available)
Proposed Activity (brief description)	Amount of funding requested
	Period of performance
	Location(s) of proposed activities

B. Activities, screening results, and findings

Proposed activities:	**Screening result**			**Findings**		
	Very Low Risk	High-Risk*	Moderate or unknown risk*	Significant adverse impacts are very unlikely	mitigation, significant adverse	Significant Adverse impacts are possible
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						

*These screening results require completion of an Environmental Review Report

C. Summary of recommended determinations (Check ALL that apply)

The Proposal contains…	***Equivalent Regulation 216 terminology***
☐ Very low risk activities	*Categorical exclusion(s)*
☐After environmental review, activities determined to have **no significant adverse impacts***	*Negative determination(s)**
☐After environmental review, activities determined to have **no significant adverse impacts, given specified mitigation and monitoring***	*Negative determination(s) with conditions**
☐After environmental review, activities determined to have **significant adverse impacts***	*Positive determination(s)**

*for these determinations, the form is not complete unless accompanied by Environmental Review Report

D. Certification

I, the undersigned, certify that:

1. The information on this form and accompanying environmental review report (if any) is correct and complete.
2. The following actions have been and will be taken to assure that the activity complies with environmental requirements established for this project
3. Those responsible for implementing this activity have received training in environmental review AND training and/or documentation describing essential design elements and best practices for activities of this nature
4. These design elements and best practices will be folloe3d in implementing this activity
5. Any specific mitigation or monitoring measures described in the Environmental Monitoring and Mitigation Report will be implemented in their entirety
6. Compliance with these conditions will be regularly confirmed and documented by on-site inspections during the activity and at its completion

(Signature)_____ (Date) _____

(Print name) _____ (Title) _____

Note: if screening results for any activity are "high risk" or "moderate or unknown risk," this form is not complete unless accompanied by an environmental review report.

BELOW THIS LINE FOR USAID USE ONLY

Clearance record

USAID RESILIM Project Officer ☐ Clearance given	

☐ Clearance denied	(print name)	(signature)	(date)
USAID/SA MEO ☐ Clearance given ☐ Clearance denied	(print name)	(signature)	(date)
Regional Env. Advisor (REA) ☐ Clearance given ☐ Clearance denied	(print name)	(signature)	(date)
Bureau Env. Officer (BEO)* ☐ Clearance given ☐ Clearance denied	(print name)	(signature)	(date)

*REA & BEO clearance is required for all "high risk" screening results and for findings of "significant adverse impacts" possible. The BEO may review "

Annex D

ENVIRONMENTAL MITIGATION REPORT

USAID MISSION SO: USAID/Southern Africa – Regional Environmental Program

Title of IP Activity: Resilience in the Limpopo Basin Program (RESILIM); XXX

IP Name: Chemonics International Inc.

Funding Period:

Resource Levels (US$) of Activity:

Report Prepared by: Name:_____ **Date:** _____

Date of Previous EMPR: _____ (if any)

USAID IEE Reference: Resilience in the Limpopo Basin Program (RESILIM). IEE Reference: http://gemini.info.usaid.gov/egat/envcomp/repository/pdf/38372.pdf

Status of Fulfilling Mitigation Measures and Monitoring:

_____ Initial EMPR describing mitigation plan is attached (Yes or No).

_____ Annual EMPR describing status of mitigation measures is established and attached (Yes or No).

_____ Certain mitigation conditions could not be satisfied and remedial action has been provided within the EMPR (Yes or No).

USAID Mission Clearance of EMPR

Contracting Officer's Representative (COR):

_____ Date: _____

Mission Environmental Officer:

_____ Date: _____

Note: If following completion of the Environmental Screening Form (ESF), a proposed grant activity does not fall within a categorical exclusion (Column A "Yes" was checked for one or more questions and "medium risk" was selected under column C), the project needs to complete this form (EMPR) and submit to the USAID/Southern Africa Mission for approval.

ENVIRONMENTAL MITIGATION PLAN & REPORT NARRATIVE

> Note: summary instructions are in italics and not to be included in the report, but rather should be filled out with project specific information)
>
> Note: Outline to be included in the report is in bold.

1. Background, Rationale and Outputs/Results Expected:

Summarize and cross-reference proposal if this review is contained therein.

2. Activity Description:

Succinctly describe location, site details, surroundings (include a map, even a sketch map). Provide both quantitative and qualitative information about actions needed during construction, how intervention will operate and any ancillary development activities that are required to build or operate the primary activity (e.g., road to a facility, need to quarry or excavate borrow material, need to lay utility pipes to connect with energy, water source or disposal point or any other activity needed to accomplish the primary one but in a different location). If various alternatives have been considered and rejected because the proposed activity is considered more environmentally sound, explain these. Describe how gender considerations have been incorporated into the activity. How will gender relations affect the achievements of activity results? How will the activity results affect the relative status of men and women?

3. Environmental Baseline:

Describe affected environment, including essential baseline information available for all affected locations and sites, both primary and ancillary activities. Describe how the activity will involve men and women who directly affect the environment. Methodologies for data collection and analysis for gender-sensitive implementation and monitoring of activities are encouraged.

4. Evaluation of Environmental Impact Potential of Activities (Table 1):

As a component of the Identification of Mitigation Plan (Appendix 2, Table 1), describe impacts that could occur before implementation starts, during implementation, as well as any problems that might arise with restoring or reusing the site, if the facility or activity were completed or ceased to exist. Explain direct, indirect, induced and cumulative effects on various components of the environment (e.g., air, water, geology, soils, vegetation, wildlife, aquatic resources, historic, archaeological or other cultural resources, people and their communities, land use, traffic, waste disposal, water supply, energy, etc.). Indicate positive impacts and how the natural resources base will be sustainably improved.

For example, any activity that increases human presence in an area, even temporarily, will increase noise, waste, and the potential for hunting, timbering, etc.

Evaluating the environmental impact potential of activities must include gender-sensitive indicators and sex-disaggregated data when the activities or their anticipated results involve or affect women and men differently; and if so, this difference should be an important factor in managing for sustainable activity impact.

5. Environmental Mitigation Actions (Tables 1 & 2):

For the Initial EMPR: List the mitigation measures in the “Identification of Mitigation Plan” (Table 1) and describe monitoring of these mitigation measures in the “Environmental Monitoring and Evaluation Tracking Table” (Table 2).

For the EMPR: Describe status of complying with the conditions. Examples of the types of questions an IP should answer to describe "status" follow.

1) What mitigation measures have been put in place? How is the success of mitigation measures being determined? If they are not working, why not? What adjustments need to be made?

2) What is being monitored, how frequently and where, and what action is being taken (as needed) based on the results of the monitoring? In some situations, an IP will need to note that the monitoring program is still being developed with intent to satisfy the conditions. Alternatively, it could happen that the conditions cannot be achieved because of various impediments.

6. Gender:

Integrating gender considerations into all stages of planning, programming, and implementation of development assistance is not only a priority for USAID, but also an essential part of effective and sustainable development. The Automated Directive System (ADS) 201 sets out specific requirements to help ensure that appropriate consideration is given to gender as a factor in development planning at the Assistance Objective and the Intermediate Results level of Assistance Objectives all the way down to the activity level. This programming policy includes clear guidance on the procedures for gender integration where determined to be appropriate. In this regard, gender issues must be addressed in procurement documents and evaluation criteria. Gender equality is a USG-wide priority, and USAID has and will continue to a take a lead role in that effort. Whenever possible, gender based differences in roles, attitudes and concerns should also be documented.

II- Identification of Mitigation Plan (Table 1)
→ Enter the Question/Row # of the potential negative impacts with check marks in Column A of the Environmental Screening Form and complete table below for mitigation measures to reduce or eliminate the issue. In the Sub-Activity or Component Column, list the main actions to be implemented. Under each action, list the tasks (Steps) that are needed to implement this action.

#	Sub-activity or component	Description of Impact	Mitigation Measures
1	Component 1		
	Step 1		
	Step 2		
	Step 3		
2	Component 2		
	Step 1		
	Step 2		
	Step 3		

* provide overview of measures used from the USAID Environmental Guidelines or other pertinent guidelines. Details on exact monitoring plan are illustrated in Table 2, Environmental Monitoring and Evaluation Tracking Table.

III. Environmental Monitoring and Evaluation Tracking Table (Table 2).

Project Name: RESILIM	
Implementing Organization: Chemonics International	
Location Name:	
Grant Title:	
Project Size:	
Nearby Communities:	
Senior Project Manager:	Date:
Monitoring Period:	

#	Description of Mitigation Measure	Responsible Party	Monitoring Methods			Estimated Cost	Results			Recommended Adjustments
			Indicators	Methods	Frequency		Dates Monitored	Problems Encountered	Mitigation Effectiveness	
1							1			
							2			
							3			
							4			
2							1			
							2			
							3			
							4			
3							1			
							2			
							3			
							4			
4							1			
							2			
							3			