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encapinfo@cadmusgroup.com

ENCAP FACTSHEET

ENVIRONMENTAL MITIGATION & MONITORING PLANS (EMMPs)

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1. INTRODUCTION

Environmental Mitigation and Monitoring Plans (EMMPs) are now required for most USAID-funded projects in Africa.

Specifically, EMMPS are required when the Reg. 216 documentation governing the project is either an IEE or an EA that imposes conditions on at least one project activity. (See box at right if these terms are unfamiliar.)

Responsibility for developing the EMMP usually lies with the implementing partner (IP), though it may be assigned to the C/AOTR. In either case, the responsible party can develop the EMMP directly, or engage a consultant. (The C/AOTR could also seek assistance from the Mission Environmental Officer (MEO).)

This factsheet describes the EMMP concept and its role in life-of-project environmental compliance for USAID-funded activities. It provides practical guidance and examples to inform EMMP development. It is intended for IPs, A/COTRs, MEOs, Monitoring and Evaluation (M&E) Officers, and consultants who may be engaged to develop EMMPs for USAID projects in Africa.

2. WHAT IS AN EMMP?

An EMMP is a document that sets out:

1. **Mitigation actions.** The EMMP specifies the actions that will be taken to satisfy the IEE or EA conditions.
2. **Monitoring actions.** The EMMP sets out the indicators or criteria that will be used to monitor (1) whether the mitigation actions have been implemented, and (2) whether they are effective and sufficient.
3. **Responsibility and schedule for mitigation, monitoring, and reporting**. The EMMP specifies the parties responsible for these actions and the schedule for these tasks.

USAID's Environmental Procedures

USAID's mandatory environmental procedures apply to all USAID-funded and USAID-managed activities. They consist of 22 CFR 216 ("Reg. 216") and related mandatory provisions of USAID's Automated Directives System (ADS)—especially, but not only, ADS 201.3.12.2.b and 204).

In summary, these procedures mandate (1) a pre-implementation environmental impact assessment (EIA) process, and (2) implementing and reporting on any environmental conditions (required mitigation measures) that result from this review.

The pre-implementation environmental review is documented in a Request for Categorical Exclusion (RCE), Initial Environmental Examination (IEE) or an Environmental Assessment (EA). Each of these Reg. 216 documents must be approved by both the Mission Director and Bureau Environmental Officer (BEO). Most IEEs and all EAs impose conditions on some or all of the activities they cover.

For more information see ENCAP's *USAID Environmental Procedures Briefing for Mission Staff.*

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EMMPs may also include a log of monitoring results and budget estimates for mitigation and monitoring activities.

EMMPs may also be called *Mitigation and Monitoring Plans* and *Environmental Management Plans*.

3. WHY EMMPs?

EMMPs provide a basis for systematic implementation of IEE and EA conditions: In addition to establishing responsibilities and schedules, EMMPs are a vehicle for translating IEE conditions (which are often very general) into specific, implementable, verifiable actions. For example:

> *An IEE for a water and sanitation project may require that wells and latrines be sited "consistent with good practices."*
>
> *The EMMP would specify the site-specific standards that the project must follow, e.g., wells must be located at least 50 meters from any pesticide or chemical store, and 25m from any cesspool, leaching pit, septic field, latrines, poultry yards, or livestock watering point..*

EMMPS also provide a framework for environmental compliance reporting. (See section 5)

Without EMMPs, experience shows that IEE and EA conditions will not be implemented systematically, if at all. This defeats the purpose of the pre-implementation EIA process as documented by the IEE or EA, increasing the probability that well-intentioned activities will result in needless adverse impacts on beneficiaries, communities, environmental resources and ecosystems.

For USAID activities, failure to implement IEE or EA conditions puts the activity in non-compliance. The AOTR or COTR is REQUIRED to compel compliance or end the activity.

4. HOW ARE EMMPs REQUIRED?

EMMPs are not specifically required by Reg. 216 or the ADS. However, they ARE required by (1) contract and award language, (2) the IEE and/or (3) A/COTR technical direction:

- Increasingly, contracts and awards specifically require that an EMMP be developed and implemented. (This is part of a broader trend within USAID to use "best practice" environmental compliance language in solicitations and awards.)
- Most recent and all new sector-level IEEs (e.g. an IEE covering a Mission's health or economic growth portfolio) require that an EMMP will be developed for each individual project.
- For new project-level IEEs, the BEO will typically require that an EMMP be submitted as part of the IEE. If not, the IEE will require that the EMMP be submitted with the project workplan or performance management plan (PMP).
- For projects conducted under older IEEs, A/COTRs can issue technical direction requiring EMMPs.

In addition, Title II Cooperating Sponsors are required to develop IEEs by the Agency's MYAP guidance and these IEEs must include an EMMP.

5. EMMP FORMATS

EMMPs are usually in table form. Critical elements of a **basic EMMP** are captured in the illustrative format below. For detail, see examples in the Annex to this Factsheet.

EMMP for Project XXX

Person Responsible for Overseeing EMMP:
[name, contact information]

Activity 1: [name of activity] [briefly describe activity & summarize potential adverse environmental impacts]			
IEE or EA Condition (reproduced or summarized from the IEE or EA)	**Mitigation** Specific actions to be taken to comply with the condition. (if an IEE or EA condition is already specific to the project/ activity and implementation actions self-evident, this "translation step" can be omitted)	**Monitoring** How will the project verify that mitigation is being implemented and is both effective and sufficient?	**Timing and Responsible Parties** Who is responsible for mitigation, monitoring, reporting? Timing/frequency of these actions

[add rows for additional conditions]
[repeat table for additional activities]

If an EMMP will contain cost information, a separate column can added. An example of an EMMP with a monitoring log, where monitoring results can be recorded, is included in the Annex.

More advanced EMMP formats can serve as both a detailed monitoring log and a management/field guide to implementing mitigation. EMMP example #3 (Small Facilities Construction) in the Annex is an example of such an "advanced format." Such advanced formats are not required, but in some circumstances they can make it easier for project management and field supervisors to oversee and implement mitigation.

6. STEPS IN EMMP DEVELOPMENT

EMMP development consists of 5 basic steps.

1. Review the governing IEE or EA to understand the conditions that apply to your project.

2. Translate IEE or EA conditions into specific mitigation actions.

3. Specify monitoring measures.

4. Specify timelines and responsible parties.

5. Determine who will have overall responsibility for EMMP implementation/environmental compliance.

Each is addressed below.

1. Review the governing IEE or EA to understand the conditions that apply to your project.

If the IEE governing your project is sector-level, the IEE usually describes activities in a high-level, general way without matching or "mapping" them to particular projects.

For example, your project might be working with agro-processors to improve product quality. In the IEE, this might be described as a "value chain strengthening" activity.

In this case, your first step in EMMP development is to match the activities in the project SOW to the general activity descriptions in the IEE, and on that basis determine which IEE conditions apply to your project activities

Even if you are developing a project-specific IEE with annexed EMMP as a package for submission (see Section 9), re-read the IEE conditions you have developed before beginning development of the EMMP.

2. Translate IEE conditions into specific mitigation actions.

(see resources for mitigation and monitoring design, at end.)

If an IEE condition is well-specified, the necessary actions to implement the condition may be self evident. However, often IEE/EA conditions are very general and they must be "translated" into well-specified, implementable, and verifiable mitigation actions.

This translation is a key purpose of the EMMP, and a key step in developing one.

Implementation, monitoring, and reporting on IEE conditions will be easier if mitigation measures are as specific as possible.

Factors to consider in **translating conditions to actions** include:

- the specifics of the site or sites
- the extent of project control

Site specifics. IEE conditions are often written without knowledge of the specific project site. You need to determine *how* and *whether* the conditions apply given the specifics of your site.

For example, an IEE might impose the following conditions on construction activities:

a. No construction permitted in protected areas or relatively undisturbed ecosystem areas.

b. Construction & facilities operation may not result in significant adverse impacts on ecosystem services

If your proposed site is in a peri-urban area already undergoing and zoned for development, condition (a) poses little concern.

But what if a seasonal stream draining several square kilometers traverses your site? In that case, a major "ecosystem service" provided by your site is drainage. So to comply with the IEE, your design must assure that there is no reduction in stream capacity or alteration to local drainage patterns.

Extent of Project Control. Often IEE conditions are phrased as "to the greatest extent practicable," or "to the degree feasible the project shall. . ."

This language is used to accommodate different levels of control over on-the-ground activities.

For example, the IEE for an agricultural project may require that an IP "assure availability, and require use and maintenance of appropriate personal protective equipment specified by the pesticide label <u>to the greatest degree feasible</u>."

What is "feasible" will depend on the level of project control over on-the-ground crop protection activities. For example:

- On a project-run demonstration farm, that control is essentially complete.
- By contrast, if a project is providing training to strengthen government extension services, the project has full control over content of the training, limited control over the recommendations made by Extension Agents, and no control over the farmers' actions. (However, other components of the project may provide closer control over farmer's actions).

The EMMP examples in the Annex illustrate this issue.

Retaining General Language in an EMMP. In some cases, it may not be possible to fully specify mitigation

actions in an EMMP, and the EMMP may include language such as "if feasible," "as practicable," or "as necessary."

For example, the EMMP for a health activity might read:

> In all plans, strategies, and other relevant documents, the need for environmentally sound collection, management, and disposal of healthcare waste, will be incorporated, as appropriate; and a budget for implementation must be included.

However, if such language is used, the need for specificity does not disappear. It is simply transferred to the person responsible for overseeing EMMP implementation. In the above case, this party would review documents and report on inclusion of healthcare waste management in these documents— and on instances where the issue was not incorporated, and why.

3. Specify Monitoring Measures.

(see resources for mitigation and monitoring design, at end.)

The EMMP should specify monitoring that will ascertain BOTH:

(1) whether mitigation was implemented.

(2) whether mitigation was sufficient and effective.

For example: To safeguard water quality, a water and sanitation IEE might require that water points be sited well away from sources of contamination and that livestock be physically excluded from the water points.

A visual inspection would show whether the mitigation was implemented. But showing that the mitigation was *sufficient* and the water safe to drink would require water quality testing.

The ENCAP training presentation "Principles of Environmental Monitoring" provides an introduction to environmental monitoring design. Examples of monitoring measures are found in the Annex to this factsheet.

Environmental compliance monitoring should be integrated into project M&E. See section 6.5, below & section 10, implementing EMMPs.

4. Specify timelines and responsible parties

EMMPs not only specify the mitigation and monitoring actions themselves, but who is responsible for them, and on what timeline or schedule.

This is not always possible for the EMMP preparer to do—s/he may be a consultant or specialist without detailed knowledge of project management and staffing. In this case, specifying timelines and responsible parties can be handed off to the individual responsible for overseeing EMMP implementation. (See immediately below).

5. Determine who is responsible for overseeing EMMP implementation/environmental compliance.

Once the EMMP is drafted, the COP or responsible senior project manager must review it and determine who will be assigned responsibility for overseeing EMMP implementation.

Overseeing EMMP implementation means having overall responsibility for verifying that mitigation measures are being implemented and for other aspects of monitoring, as well as *reporting* (see Section 8 below). Note that while one individual is typically responsible for oversight, individual mitigation and monitoring actions must be integrated into the implementation of core project activities and M&E. As such, they will be carried out by a number of project staff.

If mitigation and monitoring are complex or extensive, a project may hire a dedicated environmental compliance manager. This would often be appropriate, for example, for road rehabilitation projects—which tend to involve complex, technical mitigation and monitoring—and for agricultural projects involving pesticides or encroachment issues.

If the EMMP is fairly simple, responsibility for overseeing EMMP implementation can be assigned to the M & E Specialist, or a training or technical specialist.

Regardless, EMMP implementation oversight must be included in the job description of the individual who is assigned this responsibility.

7. PITFALLS TO AVOID

Good EMMPs avoid a set of common pitfalls. They do NOT:

- **Use unclear, ambiguous, non-actionable and/or non-verifiable mitigation measures.** For example, Good EMMPs do NOT include mitigation measures that simply state "good practices will be implemented per Chapter X of the *Environmental Guidelines for Small-Scale Activities in Africa* (EGSSAA). They DO specify which practices and which guidance from the EGSSAA will be implemented.
- **Include "extra" mitigation.** All mitigation measures must respond to a specific IEE or EA condition.
- **Use language like "as feasible," "as appropriate," etc.** unless doing so is absolutely unavoidable. (See discussion of "retaining general language in an EMMP" at the top of this page.)

8. EMMPs & ENVIRONMENTAL COMPLIANCE REPORTING

To enable C/AOTRs to fulfill their mandated responsibility to "actively manage and monitor" compliance with IEE/EA conditions, IP quarterly or semi-annual progress reports must provide an auditable record of environmental compliance—and especially of implementation of IEE/EA conditions. EMMPs provide the framework for this "environmental compliance reporting."

Sometimes the governing IEE or the C/AOTR specifies compliance reporting requirements and formats. If so, these requirements must be met.

If the reporting requirements are not specified, follow the guidance in the table below:

Situation	Environmental Compliance Reporting Content and Format
EMMP is fairly simple & contains a monitoring log section	Update EMMP with most recent monitoring data & annex to quarterly or semi-annual progress report.
EMMP is fairly simple but does not contain a monitoring log section	Consider adding a monitoring log to the EMMP and proceed as above. OR: Develop a simple table-based reporting format that lists activities, planned mitigation, and mitigation status/issues encountered.
EMMP is longer and more complex	Provide a text summary of EMMP implementation and issues encountered and resolved. Maintain a full monitoring log on file and provide to USAID upon request.

Environmental Compliance and Project Core Performance Indicators

For new projects, Africa Bureau best practice is that at least one core project performance indicator should be "environmentalized"— that is measure the extent to which core project activities are being executed with attention to environmental soundness and compliance.

For example, in a water point provision project, the IP might use the indicator "number of protected water points established with zero fecal coliform after 6 months" rather than "number of water points established."

In a road rehabilitation project, the IP might use the indicator "km or road rehabilitated under environmentally sound practices" rather than "km of road rehabilitated."

It is NOT necessary or appropriate to "environmentalize" every core indicator, or to capture every mitigation measure in core project reporting.

9. EMMP REVIEW AND APPROVAL

For project-specific IEEs (including IEE Amendments and Amendments with PERSUAPs), the EMMP will usually be developed with and submitted as an annex to the IEE. In this case, the EMMP is reviewed and approved as a part of the IEE. (Note that IEEs receive final clearance with the signature of the BEO.)

Otherwise, the EMMP will be developed together with the project workplan, budget, and performance management plan (PMP). In this case, the EMMP will be submitted together with the workplan and/or PMP to the C/AOTR, who is responsible for reviewing and approving it.

The C/AOTR may involve the MEO in this review, especially for environmentally sensitive activities. The IEE/EA will sometimes specify that the REA must review and approve the EMMP as well.

10. IMPLEMENTING EMMPS

Experience shows that systematic EMMP implementation requires:

- **Establishing accountability.** As noted in section 5.5, oversight responsibility for EMMP implementation must be assigned to an appropriate, qualified project staff member, and this responsibility must be part of their job description.
- **Workplan integration.** Where the EMMP requires discrete actions, these must be entered into the project workplan. Examples of discrete actions include, e.g. "train staff and partners in environmental compliance," "develop a PERSUAP," "undertake pollution prevention/cleaner production assessments," etc.

  By contrast, some mitigations do not result in separate workplan actions *per se*. For example, an EMMP could require that "all plans, strategies, and other relevant documents address environmentally sound collection, management, and disposal of healthcare waste."

  Environmental compliance monitoring should be a workplan item.
- **Budget integration.** Workplan items must be reflected in the project budget. However, even EMMP requirements that do *not* result in discrete actions can have cost implications. Continuing the example above, a consultant or home office technical support might be needed to assure that a plan or strategy properly addresses "environmentally sound collection, management, and disposal of healthcare waste."

The best way to make sure that cost implications of the EMMP are captured is to develop mitigation and monitoring cost estimates as part of EMMP development.

If this is not possible, budget notes should be developed for mitigation items that have cost implications, and these notes passed on to the budgeting team.

- **Management commitment & staff awareness.** Project management must communicate to all staff and partners its commitment to environmental compliance as a means to strengthen development outcomes.

  All staff should be aware in general terms of the core environmental conditions that apply to the project, and of the existence of the project EMMP.

11. ENCAP RESOURCES FOR MITIGATION AND MONITORING DESIGN

Per the table below, ENCAP has developed a set of resources to support mitigation and monitoring design.

Topic	Recommended Resource
Mitigation and Monitoring Principles	*Principles of Environmental Mitigation* *Principles of Environmental Monitoring* ENCAP training presentations; convey key principles with multiple visual examples. Include slide notes www.encapafrica.org/meoentry.htm (access via mitigation & monitoring topic)
Sectoral mitigation and monitoring guidance	*Environmental Guidelines for Small-Scale Activities in Africa. (EGSSAA)* Covers more than 20 common development sectors, and provides mitigation and monitoring guidance in table format. On-line annotated bibliographies provide links to detailed resources. www.encapafrica.org/egssaa.htm
Field Monitoring for non-specialists	*ENCAP Visual Field Guides* A supplement to the EGSSAA, these photo-based field guides allow non-specialists to quickly identify key, common environmental management deficits in small-scale activities in the following sectors: Water supply, sanitation, health care (waste), and roads. www.encapafrica.org/egssaa.htm#Guides

ACRONYMS

ADS	Automated Directives System
A/COTR	AOTR and/or COTR
AOTR	Agreement Officer's Technical Representative
AFR/SD	USAID Bureau for Africa, Office of Sustainable Development
BEO	Bureau Environmental Officer
CFR	Code of (US) Federal Regulations
COP	Chief of Party
COTR	Contract Officer's Technical Representative
EA	Environmental Assessment
EGSSAA	USAID *Environmental Guidelines for Small-Scale Activities in Africa*
ENCAP	Environmental Compliance and Management Support for Africa (AFR/SD project)
EMMP	Environmental Mitigation and Monitoring Plan
IEE	Initial Environmental Examination
IP	Implementing Partner
M&E	Monitoring and Evaluation
MEO	Mission Environmental Officer
PERSUAP	Pesticide Evaluation Report & Safer Use Action Plan
PMP	Performance Management Plan
REA	Regional Environmental Advisor
USAID	United States Agency for International Development

ANNEX: EMMP EXAMPLES

This annex contains 3 EMMP examples for typical activities and IEE conditions in the health, agriculture, and construction sectors. The examples are real, though project names and some details have been changed for the purpose of this factsheet:

1. **"The Health Improvement Program " (THIP)**
2. **"Agricultural Services Project" (ASP)**
3. **"Small Facilities Construction Project" (SFC)**

The first two examples use the general EMMP format presented in section 5. In each of these examples, a monitoring log column could be added to the far right of each table. The 3rd example is an alternate EMMP format.

Note that the examples are for a few REPRESENTATIVE ACTIVITIES within projects of this type. Most projects would have more activities, and the EMMPs would therefore be longer.

EXAMPLE 1: THE HEALTH IMPROVEMENT PROGRAM (THIP)

THIP Activity 1:
Prepare strategies and action plans to increase the import and internal distribution of pharmaceuticals

Potential Environmental Impact: Strategies and action plans could indirectly result in larger and more widely distributed in-country stocks of pharmaceuticals. These may expire prior to being distributed and/or used, and will need to be disposed of. Unsafe disposal could affect aquatic and terrestrial resources and human health.

IEE Condition	Specific mitigation actions to implement the condition	Person responsible for implementing mitigation Timing	How implementation will be verified (monitoring indicator) Responsible party & Timing
Contractor shall provide advice for safe storage and disposal of expired pharmaceuticals.	In all strategies and action plans for which THIP provides assistance, include measures for: a) storage in accordance with labels; b) disposal of expired and unused pharmaceuticals; and c) a budget to implement these safeguards.	*Responsible Party:* THIP Policy Technical Advisors *Timing:* During preparation phase of all strategies and action plans	Review of all strategies and action plans to ensure they include information about safe disposal of pharmaceuticals and a budget *Responsible Party*: THIP Policy Director *Timing*: During preparation of drafts and final documents

THIP Activity 2:
Procure pharmaceuticals from US companies.

Potential Environmental Impact: Procurement of pharmaceuticals could generate unused/expired drugs that if not disposed of safely, could affect aquatic and terrestrial resources and human health.

IEE Condition	Specific mitigation actions to implement the condition	Person responsible for implementing mitigation Timing	How implementation will be verified (monitoring indicator) Responsible party & Timing
Contractor shall provide advice for safe storage and disposal of expired pharmaceuticals.	Advise at MOH and district levels on the storage of the product according to the information provided on the manufacturer's Materials Safety Data Sheet (MSDS)	*Responsible Party:* THIP Policy Technical Advisors *Timing:* When meeting with appropriate MOH & district staff	Check storage practices are in compliance with MSDS *Responsible Party*: THIP M & E Advisor *Timing*: Semi-annually
	Train MOH and local level health practitioners and management staff on aspects of medicine supply chain management, including estimating demand, distribution constraints, and storage issues of time and temperature.	*Responsible Party:* THIP Training Advisor *Timing:* Two times/year	1) Training is implemented: M & E Advisor; monitor semi-annually; 2) Supply chain has improved (constraints/bottlenecks have decreased) THIP Policy Advisor; monitor annually

THIP Activity 3: Train healthcare workers on use of new medical procedures. **Potential Environmental Impact:** As an indirect result of training, healthcare waste (HCW) will be generated. If not collected and disposed of safely, aquatic and terrestrial resources and human health could be adversely affected			
IEE Condition	**Specific mitigation actions to implement the condition**	**Person responsible for implementing mitigation** **Timing**	**How implementation will be verified (monitoring indicator)** **Responsible party & Timing**
Training of healthcare workers should include best practices in disposal of HCW as described in the EGGSAA Healthcare Waste chapter:	Training courses should incorporate the following items, which should be included in all training on implementing new medical procedures: ▪ How to Prepare an HCW Plan ▪ Developing a Waste Segregation System ▪ Minimize, Reuse, Recycling Procedures ▪ Incorporating Good Hygiene Practices	*Responsible Party:* Training Advisor *Timing:* When course material is being developed; when training is delivered	Course material includes these topics; when course material is developed; M & E Advisor Trainings include these topics; when trainings are delivered; M & E Advisor

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EXAMPLE 2: AGRICULTURAL SERVICES PROJECT (ASP)

ASP Activity 1: Training Ministry of Agriculture extension officers to provide sound crop production advice to ASP-supported farmers **Potential Environmental Impact:** MOA extension officers could provide advice to farmers which results in expansion of agricultural land into natural areas; or that results in the unsafe use of pesticides.			
IEE Condition	**Specific mitigation actions to implement the condition**	**Person responsible for implementing mitigation** **Timing**	**How implementation will be verified (monitoring indicator)** **Responsible party & Timing**
Training shall not result in direct or indirect effects on the environment.	Training of MOA extension officers shall incorporate conservation agriculture; information on ecosystem services; and measures to minimize impacts to natural ecosystems.	*Responsible Party:* ASP Crop Production Specialist *Timing:* Curriculum Development; During trainings	Review of curricula; attend various trainings *Responsible Party:* ASP Training Officer *Timing:* At time curricula are being developed; when trainings are provided
Trainings shall not recommend pesticides without first preparing a PERSUAP that is approved by the Bureau Environmental Officer.	Note: these mitigation measures are from the PERSUAP approved by the BEO on [xxx date]: 1) Only PERSUAP-approved pesticides shall be included in training for extension officers. 2) Trainings shall include safeguards for health and safety of workers, and measures to protect the environment (Annexes A and B of the PERSUAP). 3) Trainings shall include monitoring the efficacy of pesticides as described in Annex C of the PERSUAP.	ASP Crop Production Specialist During trainings	Review of curricula; attend various trainings *Responsible Party:* ASP Training Officer *Timing:* At time curricula are being developed; when trainings are provided

EXAMPLE 3: SMALL FACILITIES CONSTRUCTION PROJECT (SFC)

NOTE: This example uses an alternate EMMP format. In this case, a project-specific IEE existed with highly specific conditions regarding siting, design requirements, and construction management practices for the small facilities (training centers, community centers) to be constructed by the project. These conditions were translated into table form (below), and for each condition a *compliance process* was specified. This EMMP format serves both as a detailed monitoring log and a management tool and guide to implementing mitigation.

IEE Condition 1: Siting Requirements for New Construction

Compliance process. At the time of initial site selection, SFC must answer the questions below for each proposed site. If a proposed site meets one of the below-listed criteria, the site must be changed OR an Africa Bureau Environmental Review Form (www.encapafrica.org/documents/AFR-EnvReviewForm-20Dec2010.doc) must be completed and approved by USAID prior to the start of construction. SFC must then implement the environmental conditions specified by the ERF.

Note: completed ERFs include an EMMP. SFC will maintain the ERF EMMPs as an annex to this project EMMP and report on their implementation to USAID.

Compliance record. The table below documents the compliance process. Note: all table entries must be dated & initialed.

Proposed Site	GPS Coordinates	Is/Does the site. . . Within 30m of a permanent or seasonal stream or water body?	Have existing settlement /inhabitants?	Have an average slope in excess of 5%?	Heavily forested?	If yes to any question, indicate ERF status or note site change; add additional row for new site.
Village A						
Village B						
(add sites as necessary)						

IEE Condition 2: Design Requirements for Small Facilities

Compliance process: (1) Design elements specified by the IEE will be incorporated into the final technical/contract specification that governs the general contractor's work. SFC will verify this for each mandated design element. (2) SFC will verify via field inspection that the final works meet these specifications, requiring remedy or otherwise resolving any non-compliant elements.

Compliance record. The table below lists all design elements mandated by the IEE and serves to document compliance status.

Required Design Elements—Training and Community Centers

A. Latrine/septic tank design prevents in-and-out access for insects or other disease vectors from the pit or holding tank.

B. Latrines are accompanied by handwash stations.

C. All sources of gray water (kitchen sinks and handwash stations) discharge to either (1) a seepage pit or sump at least 15m from any source of groundwater or surface water tapped for domestic use, or (2) to an impermeable pump-out tank.

D. Latrines or the terminus of any septic leach field must be at least 30m from any source of shallow groundwater or surface water tapped for domestic use, OR discharge to an impermeable pump-out tank.

E. Siting, grading and/or drainage structures prevent runoff from the compound from creating standing water on the compound or adjacent land during the rainy season (instances of generalized flooding excepted.)

F. Septic pump-out point, if any, shall feature a concrete apron and drain with return to the septic tank.

G. Concrete aprons with berms or gutters/sumps shall be placed under generators, fuel storage, and fuel pump-in point (if different) sufficient in each case to capture at least a 20 liter spill.

Site	Incorporated in Final Technical Specifications? *(Y/N; reference to list above)*							Built as-specified? (confirmed by field inspection) (Y/N; reference to list above)							Notes (issues and resolution)
	A	B	C	D	E	F	G	A	B	C	D	E	F	G	

Village A	Date confirmed & initials	Date of inspection & initials	
Village B	Date confirmed & initials	Date of inspection & initials	
Add sites as needed	Date confirmed & initials	Date of inspection & initials	

IEE Condition 3: Construction Management

Compliance process: (1) Construction management practices specified by the IEE will be incorporated into the final technical/contract specification that governs the general contractor's work. (2) SFC will verify that each construction management practices is being implemented via at least one field inspection during the construction process. (3) SFC will require remedy or otherwise resolve any deficits identified.

Compliance record. The table below lists all construction management practices mandated by the IEE and documents compliance status.

Required Construction Management Elements—Training and Community Centers

A. During construction, prevent sediment-heavy run-off from cleared site or material stockpiles to any surface waters or fields with berms, by covering sand/dirt piles, or by choice of location. (Only applies if construction occurs during rainy season.)

B. Construction must be managed so that no standing water on the site persists more than 4 days.

C. SFC must require its general contractor to certify that it is not extracting fill, sand or gravel from waterways or ecologically sensitive areas, nor is it knowingly purchasing these materials from vendors who do so.

D. SFC must identify and implement any feasible measures to increase the probability that lumber is from legal, well-managed sources.*

Site	Incorporated in Final Technical Specifications? *(Y/N; reference to list above)*							Implemented as-specified? (confirmed by field inspection) (Y/N; reference to list above)							Notes (issues and resolution)
	A	B	C	D				A	B	C	D				
Village A	Date confirmed & initials							Date(s) of inspection & initials							
Village B	Date confirmed & initials							Date of inspection & initials							
Add sites as needed	Date confirmed & initials							Date of inspection & initials							

*MEASURES IDENTIFIED, IF ANY, REGARDING SUSTAINABLE SOURCING OF TIMBER: [FILL IN]