USAID
FROM THE AMERICAN PEOPLE

Participants' Training Manual:

L-MEP Mainstreaming USAID Environmental Compliance Training Workshop

for USAID/Liberia Staff and Implementing Partners

Monrovia, LIBERIA • June 2011

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L-MEP Mainstreaming USAID Environmental Compliance Training Workshop

for USAID/Liberia Staff and Implementing Partners

Monrovia, LIBERIA
June 2011

Host:
USAID/Liberia

Technical Assistance provided by
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L-MEP Mainstreaming USAID Environmental Compliance Training Workshop

Monrovia, Liberia ■ June 2011

Training Agenda

Day 1: Understanding the USAID Environmental Compliance Framework

Time	Topic and Content
8:00 - 8:30 am	Workshop Registration & Coffee
8:30 – 8:45 am	Welcoming Remarks
8:45 – 9:00 am	Opening Remarks from Cadmus Training Facilitator • Overview of Agenda: Tools and Techniques • Administrative Issues • Setting Expectations
9:00 – 9:20 am	Training Pre-Test
9:20 – 9:40 am	Overview of Regulation 216 (Environmental Compliance) • Legislative Context for Regulation 216 • USAID Requirements under Regulation 216
9:40 – 10:00 am	Environmental Compliance Roles and Responsibilities • Roles and Responsibilities of Implementing Partners • Mission Responsibilities for Environmental Compliance in the Context of Strategic Development Goals
10:00 – 10:15 am	Break
10:15 – 10:30 am	ENCAP Resources • Web Link • Environmental Compliance Tools and Templates
10:30 – 12:00 am	Environmental Impact Assessment (EIA) Process • Key Components of an EIA • Environmental Impact Identification and Evaluation Process
12:00 – 1:00 pm	Lunch
1:00 – 3:30 pm	Identifying Environmental Impacts • Small Group Exercise – Identify Environmental Impacts Associated with Development Activities • Principles of Mitigation
3:30 – 3:45 pm	Break
3:45 – 4:45 pm	Environmental Monitoring • Environmental Monitoring Design Principles • Monitoring Indicators • Linkage to Environmental Impacts
4:45 – 5:00 pm	Wrap Up and Adjourn

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Day 2: Mastering Mitigation and Monitoring Fundamentals

Time	Topic and Content
8:00 – 8:30 am	Breakfast
8:30 – 8:45 am	Recap of Day 1 • Summary of Key Topics Discussed • Overview of Day 2
8:45 – 9:30 am	Environmental Mitigation and Monitoring Plans (EMMPs) • EMMP Concept • USAID EMMP Requirements • IP EMMP Responsibilities
9:30 – 10:00 am	Translating Environmental Impacts into Mitigation Measures • Key Principles • Illustrative Examples
10:00 – 10:15 am	Break
10:15 – 10:45 am	Reporting Environmental Compliance Progress and Concerns • Scope of Reporting • Reporting Format • Reporting Schedule and Feedback
10:45 – 12:00 am	Developing an EMMP - Small Group Exercise • Participants Develop EMMP
12:00 – 1:00 pm	Lunch
1:00 – 3:15 pm	Developing an EMMP - Small Group Exercise *(continued)* • Participants Complete EMMP • Participants Prepare Presentation to Review EMMP • Participants Present EMMPs
3:15 – 3:30 pm	Final Question and Answer
3:30 – 3:45 pm	Break
3:45 – 4:30 pm	Workshop Evaluations and Training Post-Test
4:30 – 5:00 pm	Closing & Certificates

Acronyms

ADS	(USAID) Automated Directives System
AFR	USAID Bureau for Africa
AFR/SD	USAID Bureau for Africa, Office of Sustainable Development
AOTR	Agreement Officer's Technical Representative
BEO	Bureau Environmental Officer
BPR	Environmental Procedures Best Practices Review
CFR	Code of (US) Federal Regulations
COP	Chief-of-Party
COTR	Contracting Officer's Technical Representative
DCHA	USAID Bureau for Democracy, Conflict and Humanitarian Assistance
EA	Environmental Assessment; Eastern Africa
ECL	Environmental Compliance: Language for Solicitation and Awards (ADS 204 Help Document)
ECSR	Environmental Compliance Status Report
EGSSAA	(USAID/AFR's) *Environmental Guidelines for Small-Scale Activities in Africa*
EIA	Environmental Impact Assessment
EMCB	Environmental Management and Capacity-Building Program (ME/TS program under the EPIQ II IQC)
EMMP	Environmental Mitigation & Monitoring Plan
ENCAP	Environmentally Sound Design and Management Capacity-Building Support for Africa (AFR/SD Program under the EPIQ II IQC.)
ERF	Environmental Review Form
ERR	Environmental Review Report
ESDM	Environmentally Sound Design & Management
FAA	(US) Foreign Assistance Act
FO	Functional Objective (under the Foreign Assistance Programming Framework)
GCC	Global Climate Change
GHG	Greenhouse gas
IEE	Initial Environmental Examination
IQC	Indefinite Quantity Contract
IRS	(Anti-malarial) Indoor Residual Spraying
ITN	Insecticide-Treated (bed) Net
IP	USAID Implementing Partner
LOE	Level of Effort
LOP	Life-of-Project
M&E	Monitoring & Evaluation
M&M	(Environmental) Mitigation and Monitoring
MCC	Millennium Challenge Corporation
ME	USAID Bureau for the Middle East
MEO	Mission Environmental Officer
NGO	Non-Governmental Organization (see also PVO)
NRM	Natural Resources Management-
PEA	Programmatic Environmental Assessment
PEPFAR	President's Emergency Plan for AIDS Relief
PERSUAP	Pesticide Evaluation Report and Safer Use Action Plan
PMP	Performance Monitoring Plan
PMI	Presidential Malaria Initiative
POC	Point of Contact
ppb	parts per billion
PVO	Private Voluntary Organization
RCE	Request for Categorical Exclusion
REA	Regional Environmental Advisor
Reg. 216	22 CFR 216
SO	Strategic Objective
Title II	Title II of US Public Law 480 (Agricultural Trade Development and Assistance Act of 1954); "Food for Peace" program.
USAID	United States Agency for International Development
USG	United States Government

Workshop Objectives & Expectations

Summary & Objectives

This brief presentation led by the training facilitator summarizes the workshop and its agenda, introduces us to each other, and establishes expectations. Specific elements include:

- Overview of Course Objectives, Approach, Agenda and Materials.
- Participant & Facilitator Introductions: Please be prepared to briefly introduce yourself, noting professional background, institutional affiliation, and current responsibilities.
- Soliciting expectations and establishing a "learning agreement."
- Logistical details.
- Creating a "Parking Lot."

Workshop Objectives, Structure, and Approach to Learning

This workshop will provide intensive training for USAID/Liberia Staff and Implementing Partners in: (1) compliance with USAID's environmental procedures during project implementation, and (2) in the underlying objectives of these procedures: environmental sustainability of USAID-funded activities.

Overall Goal. The overall goal of the workshop is to improve environmental compliance of USAID-funded activities in Liberia and strengthen environmentally sound design and management by assuring that participants have the *motivation, knowledge and skills necessary to* (1) achieve environmental compliance during the implementation phase of their projects, and (2) otherwise integrate environmental considerations in activity design and management to improve overall project acceptance and sustainability.

Approach to Learning. The workshop is intended to be highly participatory and includes several small group and "virtual" field visit activities:

- Skills and processes briefed in the presentations will be built and practiced in hands-on exercises conducted in small working groups.
- The key, integrative exercises in Identifying Environmental Impacts and the EMMP Development component are built around photo-based virtual field visits.
- *Even presentation-centered sessions are intended to be interactive*. Please ask questions and, as importantly, share and discuss your own experiences and perspectives relevant to the topic at hand.

Everyone's active participation is encouraged and needed to make this workshop a success!

Learning Agreement

As part of this discussion, we will collectively review the following principles and add or modify them as necessary to establish a "learning agreement"—an agreement about how we will work and learn together.

General Principles to consider are that each of us should:[1]

1. Participate actively.
2. Ask questions.
3. Respect different points of view.
4. Share many thoughts & ideas.
5. Build upon the ideas presented by others.
6. Join in problem-solving.
7. Make "I" statements.
8. Respect the time—everyone shows up on time, and facilitators commit to end the sessions as scheduled.
9. Silence our cell phones and blackberries.
10. Have fun!

Teamwork Principles. Working groups are where we will practice and apply the key skills and ideas of the workshop. Working groups provide the opportunity for detailed discussions, and for learning from experiences and views of fellow development professionals. Working groups are also emphasized because environmental compliance and environmentally sound design and management are intrinsically team efforts.

Successful working groups require effective teamwork. Here are teamwork principles to consider:

Twelve Essentials of Teamwork

<table>
<tr><td>VALUING DIVERSITY</td><td>COMFORTABLE ATMOSPHERE</td><td>ACTIVE PARTICIPATION OF ALL MEMBERS</td><td>SHARED GOALS AND OBJECTIVES</td></tr>
<tr><td>BALANCED APPROACH TO PROCESS AND CONTENT</td><td colspan="2" rowspan="2">WHAT EFFECTIVE TEAMS NEED</td><td>EFFECTIVE COMMUNICATION</td></tr>
<tr><td>SHARED LEADERSHIP</td><td>CONSTRUCTIVE CONFLICT MANAGEMENT</td></tr>
<tr><td>ACTION ACCOUNTABILITY RESPONSIBILITY</td><td>MUTUAL TRUST</td><td>CRITICAL ANALYSIS AND PROBLEM-SOLVING</td><td>A PREFERENCE FOR CONSENSUS</td></tr>
</table>

(Adapted from Rees, "How to lead work teams in facilitation skills")

[1] adapted from Jawara Lumumba and John Petit, REDSO/WCA, 1995

Notes for Working Group Chairs

The chair is neutral: she or he should not judge the ideas or contributions of others, but try to focus the group's energy on the common task.

The chair should encourage participation by all working group members, but prevent any one member from dominating. The chair should assist the group to function creatively, energetically, democratically and productively.

The chair must ensure that the group's tasks are accomplished in the time allotted.

When appropriate, the chair should try to achieve agreement or consensus on the task at hand. However, consensus is not required and if the group is unable to reach consensus, areas of agreement and disagreement may be reported.

Notes for Rapporteurs

The rapporteur is responsible for accurately and succinctly recording and reporting the results of group discussions.

Specific responsibilities include:

- **On a flip chart or laptop**, capturing all key points related to the specific theme, and noting comments on cross-cutting themes, as appropriate.
- Make sure that notes and charts are legible, understandable, and after reporting out, turned in to a facilitator.

Overview of USAID's Mandatory Environmental Procedures (Reg. 216 and associated ADS requirements)

Objectives

Brief the origin of, mandate behind and purpose of USAID's compulsory, environmental impact assessment (EIA)-based environmental procedures.

Achieve a common understanding of the key Life-of-Project (LOP) environmental compliance requirements set out by these procedures.

Specifically establish (1) that the primary environmental compliance responsibility of IPs is implementation of environmental conditions resulting from the pre-implementation environmental review process, and (2) that providing participants with the tools, skills and knowledge to do so is the primary purpose of this workshop.

Format

Presentation.

Important note

Note that in this workshop, the term "USAID Environmental Procedures" does not refer only to 22 CFR 216 (Reg. 216), but collectively to Reg. 216, relevant FAA requirements, and to the mandatory procedures and directives contained in the ADS.

Summary

USAID's mandatory, EIA-based Environmental Procedures are intended to assure that this 'explicit and systematic attention' actually occurs over life-of-project. USAID is *required by both court settlement and US law* to utilize an EIA-based process to "fully take into account" environmental sustainability in designing and carrying out its development programs:

- The procedures specify an EIA process that must be applied to all activities **before** implementation.
- The output of this process, defined by 22 CFR 216 (Reg. 216), is approved Reg. 216 documentation (Requests for Categorical Exclusion, Initial Environmental Examinations [IEEs], and Environmental Assessments [EAs]).
- Most IEEs and all EAs specify environmental management conditions (mitigative measures).
- These measures ("IEE/EA conditions") must be implemented and monitored over the life of the activity (or life of project, LOP). Such implementation is the responsibility of the implementing partner.
- C/AOTRs have are required to actively manage and monitor compliance with IEE/EA conditions. This requires that IPs *report* on their implementation of these conditions.

This session will introduce these key LOP compliance requirements and illustrate how the LOP process can be divided into "upstream compliance"—the pre-implementation environmental review process culminating in approved Reg. 216 documentation—and "downstream compliance," focused

on implementation of IEE/EA conditions and associated reporting. In Liberia, AFR and USAID generally, downstream compliance has historically been weaker than upstream compliance.

To strengthen downstream compliance, USAID/Liberia (among other AFR missions) is requiring IPs whose activities receive a negative determination with conditions to develop, submit and implement environmental mitigation and monitoring plans (EMMPs) for their projects. EMMPs are a systematic framework for implementing IEE and EA conditions. EMMPs are being required contractually, and by technical direction from C/AOTRs.

The focus of this workshop is providing participants with the knowledge and skills to implement IEE/EA conditions, and particularly to develop and implement EMMPs as a vehicle to achieve this.

Subsequent sessions brief and then practice each of the "building block" skills required.

More about Reg. 216 (22 CFR 216)

Reg. 216 is a US federal regulation that sets out USAID's mandatory pre-obligation/ pre-implementation EIA process. The Regulation applies to all USAID programs or activities, including non-project assistance *and* substantive amendments or extensions to ongoing activities.

The Reg. 216 process results in environmental review documentation (a Request for Categorical Exclusion (RCE), an Initial Environmental Examination (IEE), an Environmental Assessment (EA)), that must be approved by the Mission Director and by the BEO. The IEE is USAID's version of a preliminary assessment. The EA is a full EIA study.

No "irreversible commitment of resources" can occur to implement an activity unless the activity is covered by appropriate, approved Reg. 216 documentation.

When IEEs are approved with mitigation and monitoring conditions attached to one or more activities, those conditions become a required part of project design/implementation. (EAs always have such conditions.)

Across USAID programs, Reg. 216 documentation is developed both by Mission staff and Partners, depending on the situation. Title II Cooperating Sponsors, for example, are required to develop IEEs as part of their MYAPs, and other partners are often asked to develop Reg. 216 documentation for new project components. Reg. 216 documentation covering multiple projects at the sector program level is developed by Mission staff or 3rd-party contractors.

Reg 216 is the best-known portion of USAID's environmental procedures. However, Reg. 216 simply defines the pre-implementation EIA process. Unless the IEE and EA conditions that result from this process are actually implemented, (1) the activity is out of compliance; (2) the Reg. 216 process is largely meaningless; and (3) the objective of the environmental procedures (ESDM) is not achieved.

For this reason, the ADS requires C/AOTRS to REMEDY or HALT activities where IEE/EA conditions are not being implemented, or which are otherwise out of compliance.

Key resource

The *Environmental Procedures Briefing for Mission Staff* is a key reference to LOP environmental compliance. This workshop draws heavily from the *Briefing.* It is included in this Training Manual and available at www.encapafrica.org/meoEntry.htm.

Overview of USAID's Mandatory Environmental Procedures (Reg. 216 & associated ADS requirements)

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USAID'S ENVIRONMENTAL PROCEDURES: Origin & mandate

1974

An "environmental failure"

In 1974, USAID provided highly concentrated Malathion to poorly trained field workers on an agricultural project in Pakistan

Working without protective equipment in the heat, the workers sprayed each other.

5 died.

1975

Sued by US NGOs, USAID settled out of court, agreeing to develop environmental safeguard procedures.

First a court mandate

Then a mandate in law:

§117 of the FAA requires that USAID:

- **utilize an Environmental Impact Assessment (EIA) process to evaluate the potential impact of USAID's activities on the environment prior to implementation**
- **"fully take into account" environmental sustainability in designing and carrying out its development programs.**

Where are the procedures found?

USAID's Environmental Procedures are the response to these mandates. They consist of:

❖ **Federal regulations:**
22 CFR 216 ("**Reg. 216**") and

❖**Mandatory Agency Policies** as set out in USAID's Automated Directives System (ADS), (especially--but not only--201.3.12.2.b and 204.)

Compliance with the procedures is mandatory.

They apply to every program, project, activity, and amendment supported with USAID funds.

What do the procedures require? (the big picture)

1. The procedures specify an EIA process that must be applied to all activities **before** implementation
2. This process frequently results in environmental management conditions (mitigative & monitoring measures).
3. These measures must be implemented and monitored over the life of the activity/project (LOP).

Objective: Assure Environmentally Sound Design and Management of USAID-funded/USAID-managed activities.

What do the procedures require? (a little more detail)

1. ***Environmental considerations must be taken into account in activity planning .***
2. ***No activities implemented without approved Reg. 216 environmental documentation.***
3. ***Any resulting env. mitigation and monitoring conditions are:***
   1. **written into contract instruments.**
   2. **Implemented by the IP, and this implementation is monitored**

CEs, IEEs, EAs*. All are the result of the EIA process specified by 22 CFR 216

Approval = MD & BEO signatures

USAID monitors via field inspections and review of routine project reports submitted by IPs

****Categorical Exclusions, Initial Environmental Examinations, and Environmental Assessments.***

What do the procedures require? (cont'd)

4. ***Environmental compliance is assessed in Mission Annual Reports***
5. ***Environmental compliance documentation is maintained by the Mission & each sector team***

As part of the program or activity record and used to manage program implementation

More information:
USAID Environmental Procedures Briefing for Mission Staff

(in Training Manual)

About Reg. 216 & Reg. 216 documentation

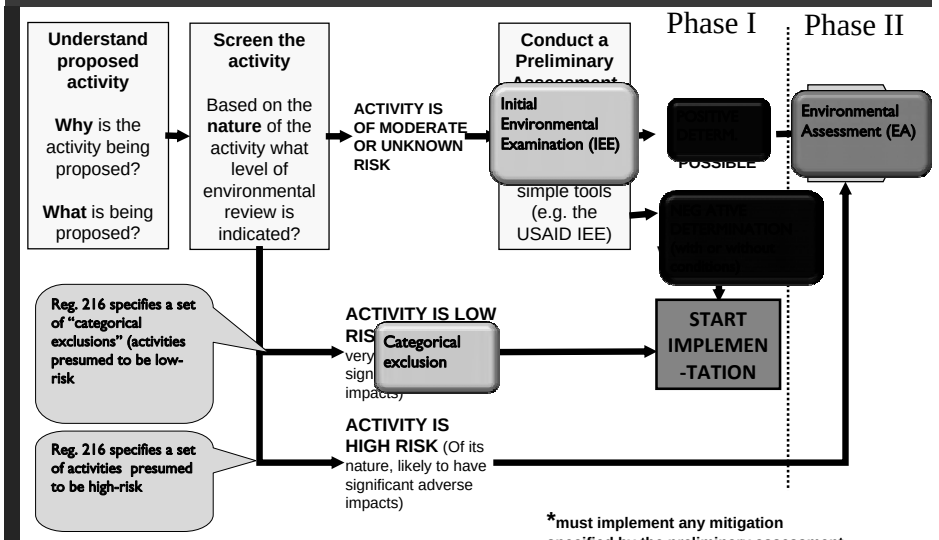
- **Reg. 216 defines the pre-implementation EIA process**
- **The output of this process is Reg. 216 documentation.**
- **The documentation assigns a determination to each activity:**

Reg. 216 documentation

Categorical exclusion request	Initial Environmental Examination (IEE)	Environmental Assessment (EA)
(affirmation that the activities qualify for a CatEx (see below)	(USAID's version of the preliminary assessment)	(full EIA study, professional team, public consultation)

Categorical exclusion	Specified classes of low-risk activities. **No attached environmental management conditions.**
Negative determination	IEE analysis shows that the activity presents low risk of significant adverse environmental impacts. **No attached environmental management conditions.**
Negative Determination w/ Conditions	As above, IF specified mitigation and monitoring is implemented. **Activity proceeds on the condition and requirement that these measures are implemented.**
Positive Determination	IEE analysis shows the activity poses non-negligible risks of significant adverse impacts. **A full EIA study ("EA") must be developed and approved before the activity can proceed, and env management measures specified by the EA must be implemented.**

Reg. 216 implements the general EIA process



*must implement any mitigation specified by the preliminary assessment

What is the status of the USAID/Liberia portfolio?

- Reg. 216 documentation exists for all projects/activities
- Many activities have received a negative determination with <u>conditions</u>
- IPs must implement these conditions and report on this implementation (as part of regular project reporting)
- USAID must verify this implementation—with support from L-MEP—& require corrective action if necessary

Requirement being implemented thru contract language & C/AOTR technical direction.

**COTRs are required to actively manage and monitor compliance with any IEE/EA conditions per ADS 202.3.6, 204.2, & 303.2.F.*

Focus of this workshop: providing the knowledge and skills to implement these conditions.

Key tool: Environmental Mitigation & Monitoring Plan (EMMP)

Is this is a change? Why this new focus? Why now?

A

USAID's environmental procedures have not changed, but across the Agency, implementation of IEE/EA conditions has been a problem

OIG & voluntary environmental compliance audits across the Africa Region have identified some common issues needing attention.

Therefore. . . USAID/Liberia is taking a number of actions to strengthen environmental compliance across its portfolio:

- **Requiring EMMPs <u>for activities with conditions</u>**
- **Requiring environmental compliance reporting**
- **With support from L-MEP:**

  Integrating environmental compliance tracking into the M&E function; Partner Environmental Compliance Training

Why is implementing IEE/EA conditions important?

- **"Reg. 216" is the part of the procedures that most people are familiar with.**
- **However, Reg. 216 simply defines the pre-implementation environmental review process.**
- **Unless the environmental mitigation and monitoring conditions that result from this process ("IEE/EA conditions") are actually implemented*:**
  - *The activity is out of compliance.*
  - *The Reg. 216 process is meaningless.*
  - *Objectives of the environmental procedures (ESDM) are not achieved.*

For these reasons, the ADS requires C/AOTRs to modify or end activities that are not in compliance!

Who is responsible?

USAID

Establishes/approves environmental mitigation & monitoring conditions. Track & verify compliance. Requires corrective action if necessary.

In the Mission

Fundamental responsibility & accountability:

- **Sector Team Leader**
- **Activity Managers & COTR/AOTRs**
- **ultimately with the Mission Director**

MEO: quality and completeness reviewer for Reg. 216 documentation; compliance advisor and coordinator; assists in compliance monitoring.

Implementing Partners

ALWAYS: Implement mitigation and monitoring conditions that apply to their project activities & report to USAID.

ALMOST ALWAYS responsible for design of detailed environmental mitigation and monitoring plan (EMMP) in response to mitigation and monitoring conditions established by the Reg. 216 documentation.

SOMETIMES develop Reg. 216 documentation (IEEs, EAs)* for new project components; develop subproject env. review reports (for subgrants/subprojects).

***Title II CSs develop IEEs as part of their MYAPs.**

What about L-MEP?

L-MEP <u>supports</u> USAID/Liberia C/AOTRs in their responsibility to "actively manage and monitor compliance" by integrating environmental compliance tracking/ verification in the M&E function.

! Fundamental C/AOTR responsibility for compliance is NOT delegated to L-MEP!

Environmental Compliance Roles and Responsibilities

Objectives

Re-cap the requirements of USAID's mandatory, EIA-based environmental procedures.

Specify roles and responsibilities for USAID staff and partners in managing environmental compliance and integrating environmental sustainability in USAID-funded activities.

Format

Presentation.

Summary

Partner and USAID environmental compliance roles and responsibilities are as follows:

Project stage	Implementing Partner	USAID
Project Design		Proactively address environmental soundness/concerns Develop Reg. 216 documentation (Responsible Party: Team Leader, Activity Manager, or C/AOTR; may engage 3rd-party contractor. MEO or REA may assist.)i Review and approve Reg. 216 documentation: Mission Director on recommendation of the MEO, BEO on recommendation of the REA.
Solicitation & Award	As required by the solicitation, • describe approach to environmental compliance/ESDM & budget appropriately • Provide relevant env compliance/ESDM qualifications	Assure that solicitation specifies environmental compliance requirements and requires proposal to include qualifications and technical approach for environmentally sensitive activities. Assure that environmental compliance requirements are written into award document Address environmental compliance in post-award briefing
Workplan & PMP Development	Develops EMMP (sometimes already developed as part of IEE or EA) Integrates EMMP into budget & workplan. Develop environmental compliance reporting framework (	Prior review and approval of: 1. the EMMP (for responsiveness to IEE/EA conditions & sufficiency of monitoring); 2. The budget/workplan (to verify that EMMP implementation is planned and funded); and 3. The reporting framework to assure that environmental reporting requirements are met. (Responsible Party: C/AOTR. MEO will review for environmentally complex projects. REA may also review.)

Implementation	Implementation of EMMP. Reporting on EMMP implementation Annually review workplan to assure all activities are covered by Reg. 216 documentation.	Ongoing review of partner progress reports to monitor EMMP implementation* Field visits*—at a minimum, all visits integrate a quick check for significant environmental design/management problems. For environmentally sensitive activities, specific visits may be made to verify EMMP implementation. Responsible Party: C/AOTR with support from M&E function/L-MEP

Note: for new activity design within a project already underway, the C/AOTR will often ask the IP to develop the Reg. 216 documentation for USAID review. Once the documentation is approved, The IP would then need to update the project's EMMP to reflect the new activity, and to implement this update.

ENCAP Resources

Objective

Review the key ENCAP project environmental compliance and environmentally sound design and management resources introduced during the workshop.

Format

Short presentation and demonstration of ENCAP Web site capabilities and resources.

Summary

This session familiarizes us with the Environmentally Sound Design & Management (ESDM) and environmental compliance resources available on the ENCAP Web site (www.encapafrica.org).

These resources may be useful to teams in developing their EMMPs and managing overall environmental compliance efforts.

These resources include:

- The *Environmental Guidelines for Small-Scale Activities in Africa*
- A number of other sectoral resources
- Training Materials
- The searchable Africa IEE and EA Archive, and the
- *MEO Resource Center*.

The session also summarizes the environmental compliance & ESDM support services available to Missions via USAID/AFR/SD's ENCAP program.

Key Resources

As referenced above.

ENCAP Resources

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Key resources on www.encapafrica.org:

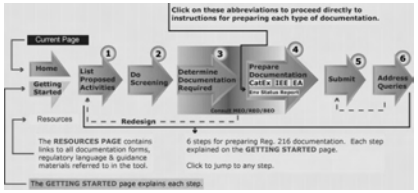
MEO Handbook
LOP Env. Compliance

New ANNEX:
short, stand-alone environmental procedures briefing for Mission Staff

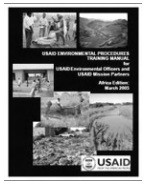
Small-Scale Guidelines
Impacts/ Issues of concern; Mitigation & Monitoring

Visual Field Guides
Quick field identification of common problems

Individual copies provided



IEE Assistant &



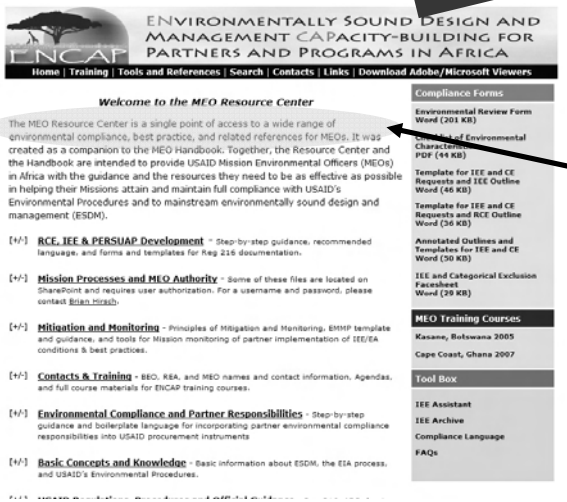
Env Procedures Training Manual
Screening and RCE/IEE development

All are available via. . .

ENCAP Resources. Visit www.encapafrica.org

MEO Resource Center

Improved!



"a single point of access to a wide range of environmental compliance, best practice, and related references. . ."

www.encapafrica.org/ meoentry.htm

ENCAP Resources. Visit www.encapafrica.org

MEO Resource Center: 12 topic areas

Basic concepts and knowledge Basic information about ESDM, the EIA process, and USAID's Environmental Procedures. Includes this *Handbook*.	**USAID Regulations, Procedures and Official Guidance** Reg 216, ADS chapters and excerpts relevant to environmental compliance, MYAP Environmental Compliance Guidance, etc.	**Frequently asked questions** Brief answers to and discussions of common environmental compliance questions. Fully searchable with linked resources and documents.
Special compliance topics Guidance and factsheets on umbrella IEEs, EAs, Pesticides procedures, GDA & DCA compliance, and more.	**IEE Archive** The searchable, on-line **BEO Actions Tracker** stores the full text of Reg. 216 documents from Africa region.	**RCE, IEE & PERSUAP development** Step-by-step guidance, recommended language, and forms and templates for Reg 216 documentation.
Sectoral guidance Environmental Best Practices, Impacts Characterization, and design of Mitigation and Monitoring Measures for typical sectoral activities.	**Mitigation and monitoring (M&M)** Principles of Mitigation and Monitoring, EMMP template and guidance, and tools for Mission monitoring of partner implementation of IEE/EA conditions & best practices	**Mission processes & MEO authority** Resources for Environmental Compliance Best Practice Reviews, Sample MEO appointment memos, SOWs and Mission Enviironmental Orders.
Environmental Compliance & Partner Responsibility Step-by-step guidance and boilerplate language for incorporating partner environmental compliance responsibilities into USAID procurement instruments	**Contacts & Training** BEO, REA, and MEO names and contact information Agendas and full course materials for ENCAP training courses.	**ENCAP Services and Assistance** ENCAP, an AFR/SD program, provides tools, resources, technical assistance and capacity building to USAID/Africa Missions and partners to strengthen environmental management and environmental compliance.

ENCAP Resources. Visit www.encapafrica.org

ENCAP Services

ENVIRONMENTALLY SOUND DESIGN AND MANAGEMENT CAPACITY-BUILDING FOR PARTNERS AND PROGRAMS IN AFRICA
Home | Training | Tools and References | Search | Contacts | Links | Download Adobe/Microsoft Viewers

- **ENCAP. . .**
  - *A program of USAID/AFR/SD*
  - *provides tools, resources, technical assistance and capacity building* ***to strengthen environmental management and environmental compliance***
  - *serves USAID/Africa Missions and partners.*
- **ENCAP services are available. . .**
  - *On a subsidized basis (access via request to REA), or*
  - *Via TO buy-in/direct contract with ENCAP program partners.*

For more info. . .

read "ENCAP Services & Assistance" on the MEO Resource Center

visit www.encapafrica.org.

contact the ENCAP core team at:

encapinfo@cadmusgroup.com

ENVIRONMENTALLY SOUND DESIGN AND MANAGEMENT CAPACITY-BUILDING FOR PARTNERS AND PROGRAMS IN AFRICA
Home | Training | Tools and References | Search | Contacts | Links | Download Adobe/Microsoft Viewers

ENCAP Service Areas

1. **Assistance in incorporating partner environmental compliance responsibilities into procurement instruments.**
2. **Design and evaluation of EMMPs for compliance with IEE and EA conditions.**
3. **Development and review of Reg. 216 documentation, including IEEs, PERSUAPs, and EAs.**
4. **Development of sub-project environmental review processes and associated training**
5. **Support for IPM, safer pesticide use and pesticide procedures.**
6. **Preparation of FAA 118/9 (Environmental Threats and Opportunities) Assessments.**
7. **Conduct of environmental due diligence in support of GDA activities.**
8. **Program design and evaluation support to incorporate environmental concerns and Reg. 216 compliance**
9. **Mission Environmental Procedures Best Practices Reviews (BPRs)**
10. **Assistance in implementing BPR Action Plans.**

And other services upon request.

The Environmental Impact Assessment (EIA) Process: Part 1

Objectives

- Achieve a common understanding of "environment."
- Understand Environmentally Sound Design & Management (ESDM) as a necessary and explicit objective for effective development.
- Establish the basic principles for achieving ESDM.

Format

Presentation, solicitation of participant experiences.

Summary

This session will:

- Develop a common understanding of the term “environment.”
- Highlight some of the “big picture” environmental trends affecting human health and livelihoods in sub-Saharan Africa, including Global Climate Change; and show that much of USAID’s portfolio in the region is a direct response to—or directly affected by—these trends.
- By example, demonstrate that “environment” and “development” are concepts further linked by the need to be:

  AWARE of the potential adverse impacts of development activities on ecosystems, environmental resources and environmental quality; and the need to

  PROACTIVELY seek to limit these adverse impacts, particularly where they affect health and livelihoods.

  This is **Environmentally Sound Design and Management (ESDM).**
- Highlight the most common root causes of ESDM failures or lapses.
- Set out the basic rules or principles for achieving ESDM.
- Establish that ESDM is a necessary and explicit objective for effective development, and that ESDM requires systematic and explicit attention over life-of-project.

Key resource

“I.02 Environmentally Sound Design” in *Environmental Guidelines for Small Scale Activities in Africa.* (USAID/AFR/SD; available at www.encapafrica.org/egssaa.htm).

The Environmental Impact Assessment Process: Part 1

L-MEP Mainstreaming USAID Environmental Compliance Training Workshop
Monrovia, Liberia ▪ June 2011

Environment – the Big Picture

What is Environment?

- *Webster's defines it as "The totality of circumstances surrounding an organism or group of organisms, especially:*
  - The complex of **physical, chemical, and biotic factors** (e.g. climate, soil, and living things) that affect and influence the growth, development, and survival of an organism or an ecological community
  - The complex of **social and cultural conditions** affecting the nature of an individual or community.

❖ USAID's environmental procedures are concerned with the "natural and physical environment," but in practice social and cultural issues are often not separable

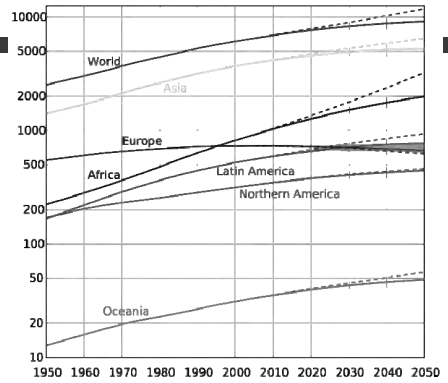
What are some "big-picture" environmental trends affecting human health and livelihoods in Sub-Saharan Africa? Are they important in Kenya/E Africa?

1. Population growth

UN Population estimates:*

	Today	2050	% change
World**	6.9bn	9.3bn	+35%
SSA**	856mn	1.96bn	+129%
W Africa**	304mn	744mn	+145%
Liberia	4mn	9.7mn	+143%
Less-Developed Regions**	5.7bn	7.9bn	+40%
LDCs	863mn	1.74bn	+102%

**includes Liberia



* All data: "medium variant" projection.
UN Population Division http://www.un.org/esa/population/

Fastest anticipated population growth in SSA through 2050 will occur in next 5 – 10 years

LEADS TO

Increased demands for water, land, fish & timber, energy, infrastructure & social services. Increased waste production.

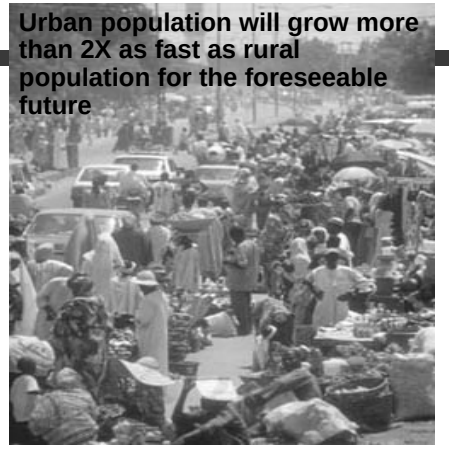
2. Urbanization

UN estimates:*

	Urban pop as % of total		% change in total urban population
	Today	2050	
World**	50.5%	68.7%	+80%
SSA**	37.2%	60.1%	+228%
W Africa**	44.9%	68.4%	+212%
Liberia	47.8%	69.1%	+211%
Less-Developed Regions**	45.3%	67%	+107%
LDCs**	29.4%	55.5%	+280%

**includes Liberia

Urban population will grow more than 2X as fast as rural population for the foreseeable future



Between 2030-2035, African population & poverty becomes > 50% urban

LEADS TO

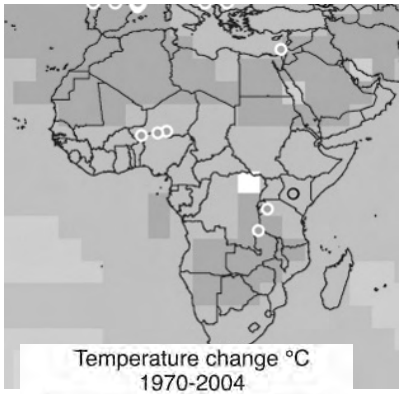
Increased urban environmental health hazards (given poor municipal sanitation, waste management capacity).

* UN Population Division
http://esa.un.org/unup/index.asp

3. Global climate change: Africa

- **Arid & semi-arid lands** ↑ 5-8% by 2080s
- **Sea-level** ↑ 0.3-0.4m by 2100
- Precipitation patterns change.
- **climate variability** ↑ & **extreme events** ↑
- **Median temperature** ↑ 3-4°C (end of century)
- **Rain-fed agriculture yields** ↓ **50%** in some countries by 2020. Crop & Disease zones shift.

100% of observed data series in Africa for physical, biological systems consistent with global change

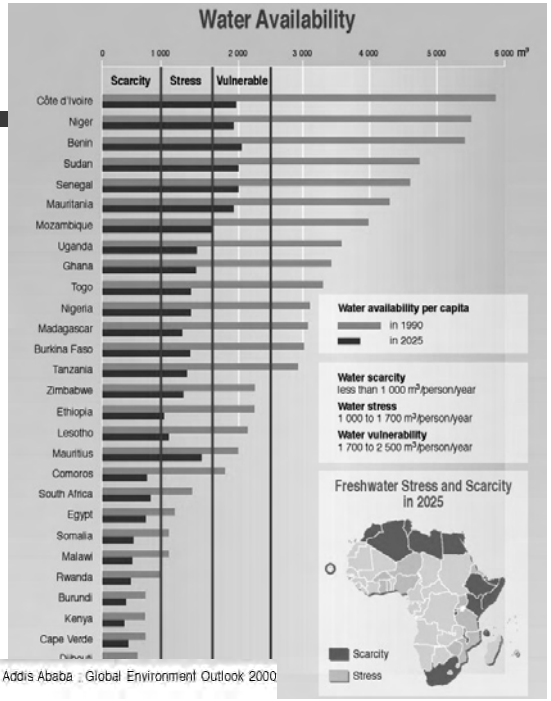


IPCC 4th Assessment Report, 2007.
www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf

Global change + population growth =

INCREASED WATER STRESS

Greatest impacts on poor, subsistence agriculture.



Source: United Nations Economic Commission for Africa (UNECA), Addis Ababa ; Global Environment Outlook 2000 (GEO), UNEP, Earthscan, London, 1999.

Environment and development are not separable

- Much of USAID's portfolio in the region is already a direct response to or directly affected by these environmental trends
- But good development does not simply respond to external environmental challenges. Good development …
  - is **AWARE** of its **potential adverse impacts on ecosystems, environmental resources and environmental quality and**
  - **PROACTIVELY seeks to limit** these adverse impacts, particularly **where they affect health and livelihoods**

Why? To avoid MISTAKES. . .

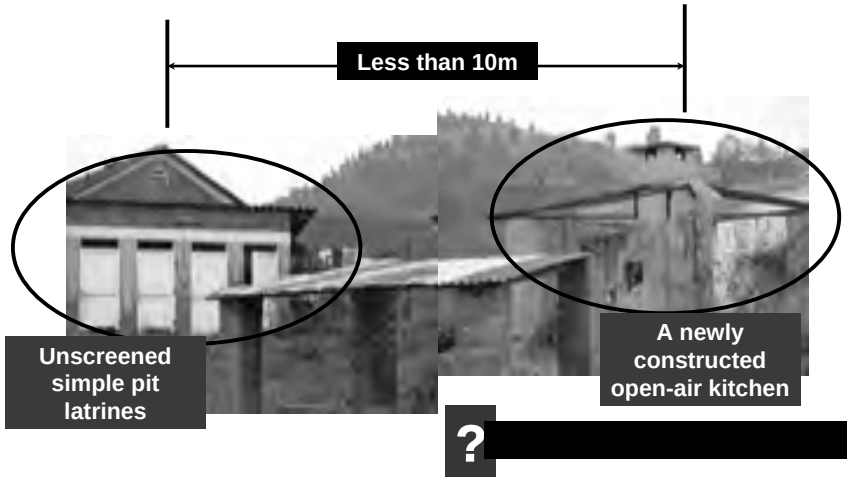
Example: Health care facilities

- **Goal: Improve public health**
- **Risk: Endanger the health of patients and the community with poor facilities design & improper waste management**

An unused incinerator. . .

surrounded by needles & other medical waste (open access to livestock, ~15m from households)

Example: Health care facilities



Example: Water & Sanitation Activities

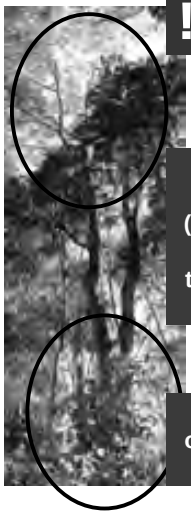
- **Goal:**
  Improve/preserve public health & quality of life
- **Risks:**
  Endanger public health, degrade water supply, with poor design and operation

Example: Community Reforestation

An activity intended to improve the environment!

- **Goals:**
  Conserve soil & prevent erosion, provide building materials & fuel, reduce risk/impacts of flooding
- **Risks:**
  - *Deplete water table,*
  - *Displace local plants and vegetation,*
  - *Intensify use of pesticides*
  - *Increase community vulnerability*

Example: Community Reforestation



Unforeseen long-term vulnerabilities created by monoculture reforestation will likely affect thousands of small coffee producers.

Why are “environmental mistakes” made?

Sometimes obvious (previous examples).

But often difficult to foresee, predict

Most often rooted in a few common design problems

- **! Failure to plan for the effects of increased scale**
- **! Designing for average conditions**
- **! Ignoring economic-environmental linkages**

Common root causes #1

! Failure to plan for the effects of increased scale

Or, failure to plan for success!

The environmental effects of a small-scale animal husbandry project may be minor

BUT if the project is successful, and many more individuals begin to hold larger numbers of animals, serious problems may arise. . .

Health hazards from animal waste. . .

Fodder shortages (may lead to overgrazing and erosion and/or land conflicts)

Common root causes #2

Global change will affect both average conditions & expected variability

! Designing for average conditions, not expected variability

This schoolhouse is being rebuilt in makeshift fashion with plank walls and a split-bamboo roof.

Why? Strong winds ripped the aluminum sheet roofing off the “permanent” structure and toppled the landcrete walls.

In this area, one or two storms every 5 years typically have winds of this strength.

Other “average conditions” to be careful of: Rainfall, tides, water tables. . . What else?

Common root causes #3

! Ignoring economic-environmental linkages

Another failure to plan for success!

Household consumption depends on income.

Success in raising income in a community may increase

- **demand for building materials (brick & timber)**
- **the number of livestock,**
- **demand for water**
- **generation of waste, including disposable packaging**

All can have significant adverse environmental impacts!

How can we avoid these environmental mistakes (and maximize environmental benefits)?

?

In short, how can we achieve . . .

Environmentally Sound Design & Management (ESDM)?

How do we achieve ESDM?

3 basic rules:

1. **Be prevention-oriented**
2. **Apply best development practices to environmental aspects of the activity**
3. **Be systematic**

1 Be prevention-oriented

Prevention occurs across the project lifecycle—but it starts with design!

1.Implement design decisions

2. Build capacity for environmentally sound operation

Design → **Construct/ implement** → **Operate** *(may include handover)* → **Decommission** *(in some cases)*

Make decisions about site, technique and operating practices to minimize impacts

1. Implement & maintain proper operation

2.Monitor the activity and its impacts

ESDM is prevention-oriented

- **Prevention starts with DESIGN**
- **DESIGN starts with the choice of means.**
- **Environmental impacts are 1 factor considered**

Objective

Improve agricultural productivity

Possible *means* **How do we choose?**

2 Apply best practices

Apply general best development practices. . .

A technically sound design	**To build beneficiary capacity & stakeholder commitment**
To design for the local social & policy context	**To adjust what we do as results come in**

. . .to <u>environmental</u> aspects of the activity

AND design for climate change

BP #1: Technically sound design

Environmental application:

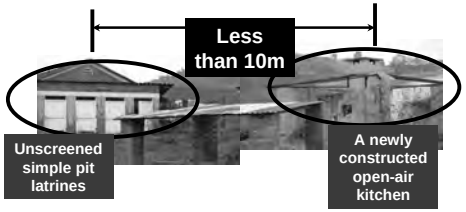
The design must be appropriate for local <u>environmental</u> conditions ….taking into account likely climate change.

… Rainfall, temperature, soils, flood, drought and earthquake potential, the built environment. . .

For example. . .

? **Appropriate choice of crops or trees?**

? **Appropriate choice of siting?**



BP #2: Design for the policy and social context

Environmental applications:

Compliance

with national and local environmental laws and policies

Language, literacy

Environmental management measures must be matched to capabilities

NRM and land tenure

Activities utilizing land and other natural resources must be compatible with local NRM and land tenure

land and resource rights are often gender-specific

BP #3: Build stakeholder commitment & capacity

! **Environmental application:**

Proper maintenance and operation are critical to controlling environmental impacts.

Local beneficiaries need to be trained and committed to:

- **environmentally sound operation.**
- **maintain the equipment/ structure**

Who will maintain it?
Who will operate it?

. . . and involve the local community

Ethics require it
(environmental justice)

Local residents must live with the environmental impacts of activities!

LOCAL KNOWLEDGE is critical

- How often does the river flood?
- How often are crops rotated?
- Is there a land tenure problem?
- What do people value and need?

LISTEN to the community

TALK to both men and women

BP #4: Adjust what we do as results come in

Practice Adaptive management –

adjusting implementation of our activity based on results from the field

If our activity has unintended environmental consequences, we need to DO SOMETHING ABOUT IT!

Communities are often essential to monitoring results from the field

Adaptive <u>environmental</u> management requires:

- A project budget that funds environmental monitoring
- The flexibility to adapt the project in response to unanticipated adverse impacts
- Adjusting implementation of our project based on the experiences of others

BP #5: Design for Climate Change

Already mentioned:
Climate change will affect future baseline conditions—projects must be designed to be ROBUST to these conditions

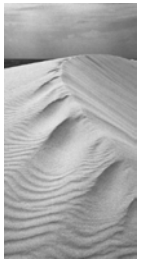
But in addition

While individual projects are rarely significant contributors to GCC. . .

. . .climate change is driven by the sum of many small actions.

So even small-scale projects should seek to reduce GHG emissions/increase sequestration/ reduce climate vulnerability in the local area in a manner consistent with their development objectives.

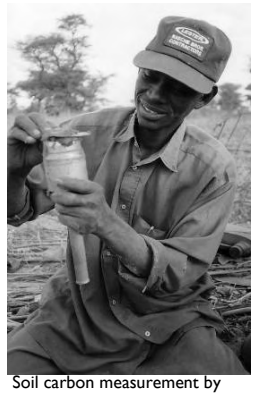
USAID Policy!



Best Practice: Design for Climate Change

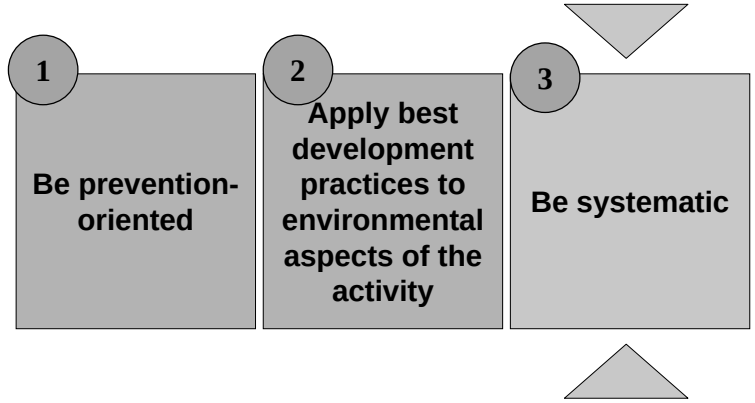
Example actions in small-scale projects:

reduce GHG emissions	Use alternative energy (PV, windmill water pumping, etc)
	Improve thermal performance in building design
	Buy carbon offsets for int'l travel.
reduce climate vulnerability in the local area	Prioritize water efficiency to reduce a project's contribution to the area's future water stress
increase sequestration	Tree-planting.
	Land management (sustainable grazing, cropping)



Soil carbon measurement by hand in Senegal

Now, rule 3 for achieving ESDM. . .



3 Be systematic

Take a systematic look at:

- **the possible adverse environmental impacts of an activity**
- **ways to reduce these impacts.**

The best way to be systematic:
Environmental Impact Assessment (EIA)!

The Environmental Impact Assessment (EIA) Process: Part 2

Objectives

- Achieve a common, basic understanding of the EIA process and key EIA concepts.
- Motivate the EIA process by establishing that EIA is the internationally accepted standard framework for achieving ESDM in project-based development and underlies compliance with USAID Environmental Procedures.

Format

Presentation.

Summary

This session will:

- Define Environmental Impact Assessment (EIA) as a formal process for identifying the:

  likely effects of activities/projects on the environment, and on human health and welfare; and

  means and measures to monitor & mitigate these impacts.

- Show that the EIA process provides a systematic framework to achieve ESDM and establish that this process is the internationally accepted standard framework for achieving ESDM in project-based development.
- Outline how the EIA process is being used to address the effects of climate change on projects, and to inform mitigation planning.
- Explain that EIA-based environmental "safeguard" processes are now standard requirements of nearly all donors and governments, including the US Government/USAID.

Key resource

"IV.1: Topic Briefing—Introduction to EIA" in *Environmental Guidelines for Small Scale Activities in Africa.* (USAID/AFR/SD; available at www.encapafrica.org/egssaa.htm).

USAID
FROM THE AMERICAN PEOPLE

The Environmental Impact Assessment Process: Part 2

L-MEP Mainstreaming USAID Environmental Compliance Training Workshop
Monrovia, Liberia ▪ June 2011

Why this session? Isn't this workshop about USAID's Environmental Procedures, not EIA?

A **USAID's environmental procedures are a specific implementation of the general EIA process**

Understanding the basic EIA process makes USAID's procedures much easier to understand.

Mastering a set of core EIA skills is required for effective compliance during project design and implementation.

Defining EIA

✔ **Environmental Impact Assessment is**

A formal process for identifying:

- **likely effects of activities or projects on the environment, and on human health and welfare.**
- **means and measures to mitigate & monitor these impacts**

Origins of EIA

Cuyahoga River burns in 1966 (3rd time), Cleveland, Ohio, U.S.

1952 "Killer fog" kills 4,000 in London

1963 *Silent Spring* documents the effects of DDT

Etc. . .

1960s & 70s: Environmental crisis affects all industrialized economies

EIA is one response:

First national EIA requirements: ***1970 US National Environmental Policy Act (NEPA)*** *requires EIA for US government projects.*

Other responses: regulation of industry, environmental treaties. . .

EIA today

- **Most countries & almost all donors (including USAID) now have EIA requirements**
- **EIA now extends beyond government works to**
  - *Infrastructure and economic development projects funded by the private sector & donors*
  - *Analysis of policies, not just projects*
- **In many developing countries, national environmental regulation is centered on EIA requirements**

Key EIA concept: What is an impact?

The impact of an activity is the change from the baseline situation caused by the activity.

! To measure an impact, you must know what the baseline situation is.

The baseline situation is the existing environmental situation or condition in the absence of the activity.

The baseline situation is a key concept in EIA.

More…

Characterizing the baseline situation. . .

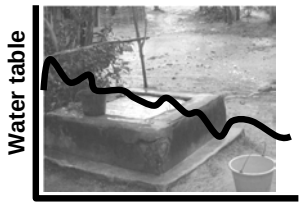
the environmental components of interest are those:

- **likely to be affected by your activity**
- **upon which your activity depends for its success**

Water?	*Quantity, quality, reliability, accessibility*
Soils?	*Erosion, crop productivity, fallow periods, salinity, nutrient concentrations*
Fauna?	*Populations, habitat*
Env Health?	*Disease vectors, pathogens*
Flora?	*Composition and density of natural vegetation, productivity, key species*
Special ecosystems?	*Key species*

The baseline situation

The baseline situation is not simply a "snapshot."



This chart of groundwater levels shows both variability and a trend over time.

Both are part of the groundwater baseline situation.

Types of impacts & their attributes

The EIA process is concerned with all types of impacts and may describe them in a number of ways

- **Direct & indirect impacts**
- **Short-term & long-term impacts**
- **Adverse & beneficial impacts**
- **Cumulative impacts**

- **Intensity**
- **Direction**
- **Spatial extent**
- **Duration**
- **Frequency**
- **Reversibility**
- **Probability**

But all impacts are NOT treated equally.

Focus on the most significant impacts is ESSENTIAL

You probably do not have time and resources to analyze and discuss in detail less important ones.

What is an activity?

The EIA process examines the impacts of activities.

✓ **An activity is:**

a desired accomplishment or output

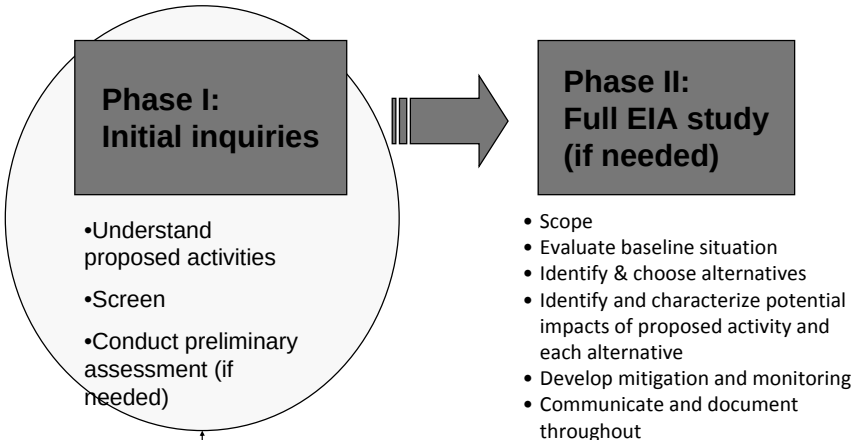
E.g.: a road, seedling production, or river diversion to irrigate land

Accomplishing an activity requires a set of actions

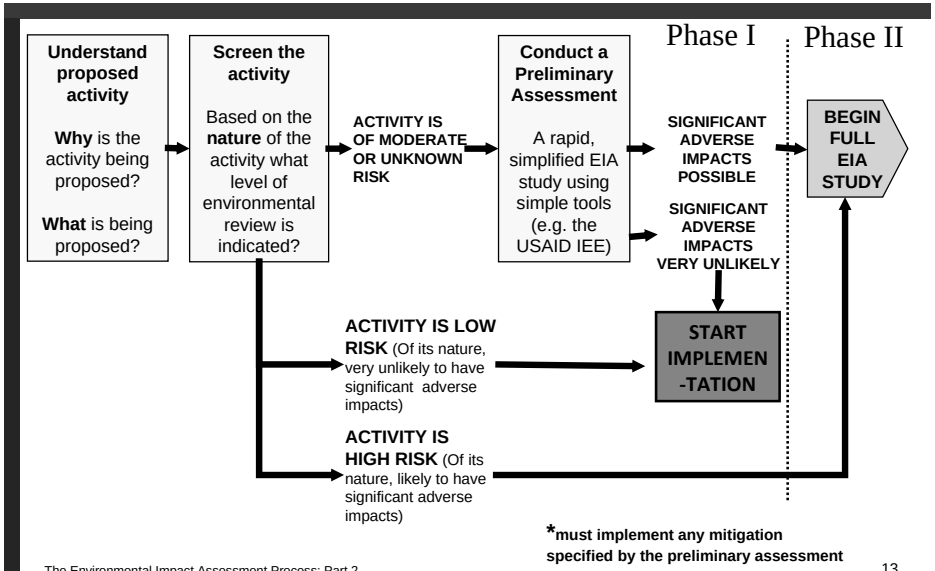
ACTIVITY:	ACTIONS:
market access road rehabilitation	Survey, grading, culvert construction, compaction, etc. . .

A project or program may consist of many activities

The EIA process



Phase 1 of the EIA Process



Phase 1 of the EIA process:

Screen the activity

Screen each activity

Based on the **nature** of the activity, what level of environmental analysis is indicated?

SCREENING asks a very basic set of questions about the activity.

Example screening questions:
Does the activity involve:
- **Penetration road building?**
- **Large-scale irrigation?**
- **Introduction of non-native crop or agroforestry species?**

These questions do <u>NOT</u>:
- **require analysis.**
- **require detailed knowledge of the proposed sites, techniques or methods**

! Each donor agency (like USAID) and national EIA law has its own set of screening criteria.

Phase 1 of the EIA process:

The Preliminary Assessment (e.g. USAID's IEE)

Conduct a Preliminary Assessment

A rapid, simplified EIA study using simple tools (e.g. the USAID IEE)

Purpose:
provide documentation and analysis that:

- **Allows the <u>preparer</u> to determine <u>whether or not significant adverse impacts are likely</u>**
- **Allows the <u>reviewer</u> to agree or disagree these determinations**
- **Sets out mitigation and monitoring for adverse impacts**

! Screening determines whether the preliminary assessment is necessary

Phase 1 of the EIA process:

The Preliminary Assessment

Typical Preliminary Assessment outline

1. Background (Development objective, list of activities)
2. Description of the baseline situation
3. Evaluation of potential environmental impacts
4. **Mitigation & monitoring**
5. **Recommended Findings**

For each activity it covers, a preliminary assessment has 3 possible findings:

The activity is. . .

- **very unlikely to have significant adverse impacts.**
- **unlikely to have significant adverse impacts with <u>specified mitigation and monitoring</u>,**
- **likely to have significant adverse impacts (full EIA study is required)**

! **We only proceed to Phase II of the EIA process**

if

Phase I indicates that a FULL EIA STUDY is required

Phase 2 of the EIA process:

The Full EIA study (e.g. USAID's Env Assessment)

The full EIA study has very similar objectives and structure to a preliminary assessment.

However, the full EIA study differs in important ways:

**includes the project as proposed, the no-action alternative at least one other real alternative*

! **A formal scoping process precedes the study to ID issues to be addressed**

! **Analysis of environmental impacts is much more detailed**

! **Alternatives* must be formally defined. The impacts of each alternative must be identified & evaluated, and the results compared.**

! **Public participation is usually required.**

A professional EIA team is usually required.

EIA: A framework for ESDM

- **EIA: the internationally accepted process to achieve ESDM.**

Why?
The EIA process requires a systematic treatment of all ESDM elements.

EIA: A framework for ESDM

1

Be prevention-oriented

- **Prevention begins with choice of means. "Consider alternatives" is a key principle of EIA.**
- **EIA provides a formal process to consider environmental issues and make changes at early stages in project design. Early consideration is key to prevention.**

EIA: A framework for ESDM

2

Apply best development practices to environmental aspects of the activity

Technical soundness	**EIA requires characterizing environmental conditions**
Stakeholder commitment	**Stakeholder consultation is central to EIA**
Adaptive management	**EIA requires a systematic approach to field monitoring**

How does EIA address Climate Change?

Institutional and professional practice is evolving rapidly. . .

- **"Pure" EIA assesses the impacts *of* an activity *on* the environment**
  - *Usually only very large projects are significant contributors to GCC*
- **Usually of greater concern: the impacts of GCC *on* project performance/sustainability**
  - *= a **climate vulnerability assessment***
  - *Requires same skills as EIA*
  - *Focus is not mitigation of impacts, but changes to project design to reduce climate vulnerability*

Highly complementary, and therefore combined into a single process/ document

Meaning. . .

When climate change considerations are important. . .

- **climate change mitigation and adaptation planning and management should be addressed in the outputs of the EIA process**
  - ***Adaptation planning and management mechanisms should be incorporated in the environmental mitigation and monitoring plan***
- **Examples:**
  - ***Add project component targeted at clean energy or avoiding emissions***
  - ***Siting options for the extension or modification of roads***
  - ***Add activities to reduce flood and landslide risk***

EIA: A Framework for ESDM. Visit www.encapafrica.org.

EIA: More than just a good idea

! EIA is:

- **REQUIRED BY LAW in most countries.**
- **REQUIRED by almost all donors.**

Summing up

- **ESDM requires (a) design and implementation of activities with an understanding of their environmental impacts, and (b) active efforts to minimize these impacts.**
- **ESDM requires following 3 basic rules:**

  be prevention-oriented,
  apply best development practices, and
  be systematic.

- **EIA is a tool to make ESDM a reality.**

Identifying Environmental Impacts and Principles of Mitigation

Objectives

Become familiar with the principles and processes that constitute the core EIA skills of baseline characterization, identifying issues and impacts of concern, and mitigation design.

Establish that because effective mitigation design must be highly responsive to site conditions, effective mitigation design requires baseline characterization and issues identification skills.

Format

Presentation and worked examples.

Summary

The EIA process requires the following core skills:

(1) characterizing the **baseline situation**;

(2) identifying (and evaluating) the potential adverse **impacts** of planned development activities (issues of concern); and

(3) developing mitigation and (4) monitoring measures to address these impacts.

("Baseline situation," "impacts" and "mitigation and monitoring" were defined in previous sessions.)

This session addresses core skills 1-3; the fourth (monitoring) is addressed in a forthcoming session.

At first thought, characterizing the baseline situation and identifying issues of concern might seem relevant only to developing IEEs and EAs—not to implementing IEE and EA conditions (i.e., mitigation).

However, IEE and EA conditions are often very general. They require IPs to identify issues of concern particular to a site & respond with appropriate, specific mitigation measures. Thus effective mitigation requires a familiarity with all core EIA skills.

Part 1: Baseline Characterization & Determining Impacts of Concern

The first part of this session explains the basic, logical process behind baseline characterization and identifying issues of concern. We will illustrate the process with a worked example.

An example from a real project in the WestAfrica subregion will illustrate why the core EIA skills of baseline characterization and identifying issues of concern are directly relevant to effective mitigation.

Depending on the size, complexity and context of the activity, sophisticated environmental models and other tools *can* be required to evaluate impacts in the context of a full EIA study. But for most small-scale activities and preliminary assessments, the simple, logical process described here, supported by good judgment and the information contained in the *Small Scale Guidelines* (or similar resources), is sufficient.

Part 2: Mitigation.

The purpose of the EIA process is not simply to assess potential environmental impacts, but to change project design and implementation so that these impacts are *mitigated*—that is, avoided, reduced or offset.

As such, mitigation is a critical part of ESDM and the EIA process. Monitoring is its essential complement, required to verify whether the mitigation measures are sufficient, effective—and actually implemented.

The second part of this session:

- Defines mitigation.
- Provides examples of basic mitigation approaches.
- Explains the principles behind good mitigation design and practice.

Key resources

The sector chapters of the *Environmental Guidelines for Small-Scale Activities in Africa* is a key resource for (1) identification of potential adverse environmental impacts and (2) design of mitigation and monitoring measures.

"IV.1: Topic Briefing—Introduction to EIA" in *Environmental Guidelines for Small Scale Activities in Africa.* (USAID/AFR/SD; available at www.encapafrica.org/egssaa.htm) is a general resource for core EIA skills.

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Identifying Environmental Impacts and Principles of Mitigation

L-MEP Mainstreaming USAID Environmental Compliance Training Workshop
Monrovia, Liberia ▪ June 2011

Core EIA Skills for Implementing IEE/EA conditions

Baseline Characterization

Identifying Impacts of Concern

Mitigation & Monitoring Design

Employed in developing the IEE---but also critical to making mitigation responsive to local environmental conditions

Obvious key skills for implementing IEE conditions

Therefore, we cover all 3 core skills. . .

Impact evaluation process: theory

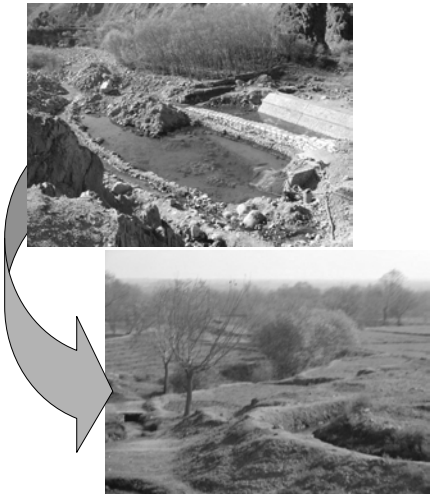
1. **Understand the activities being proposed**
2. **Research the potential adverse impacts typical of these activities & know how they arise**
3. **Based on the potential impacts, identify which elements of the baseline situation are important**
4. **Characterize these elements of the baseline**

And then

5. **Given:**
   1.the baseline conditions,
   2.the project concept/design, and
   3.How the adverse impacts arise,
   decide which impacts are of concern

Impact evaluation process: example

1. **Proposed intervention: irrigation scheme**
   (wing dam diversion type ▪ water-intensive crops ▪ high fertilizer use, unlined canals & open-channel irrigation)
2. **Key potential impacts:**
   - *Excessive diversion of water*
   - *Salinization of soils*
   - *Contamination of groundwater & downstream surface water*
3. **Key elements of baseline:**
   - *River flow volume, variability*
   - *Soil & water characteristics & groundwater depth*
   - *Downstream uses*



Impact evaluation: example

4 Baseline characterization

- *River flow volume, variability*
  - Will divert 3% of normal flow
  - low-year flows are 50% of normal
  - River is not over-utilized downstream
- *Soil characteristics & groundwater depth*
  - Soils are well-drained but relatively high in salts; groundwater 2m depth
- *Downstream uses*
  - Key water source for community domestic use & livestock, immediately downstream.

5 Therefore:

Impacts of Concern:

Salinization

Downstream contamination

Little Concern:

Excess Diversion

? Why?

Why is this relevant to me?

I thought the IEE for my project already identified all the "impacts of concern"?

A IEE conditions are often very general.

- **They require IPs to identify issues of concern particular to a site & respond with appropriate, specific mitigation measures.**

For example. . .

Medium scale construction. . .

Activity: Development of institutional compound/ training facility (perimeter wall, offices & classrooms, canteen, genset & fuel storage, latrine block, etc.)

IEE Conditions:

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

2. Construction & facilities operation may not (a) result in significant adverse impacts on ecosystem services or (b) adversely affect the quality of surface or groundwater tapped for domestic use.

Etc.

The baseline situation determines the relevance of these conditions & specific issues of concern mitigation must address

Inspection of baseline conditions at the site identifies issues of concern for mitigation. . .

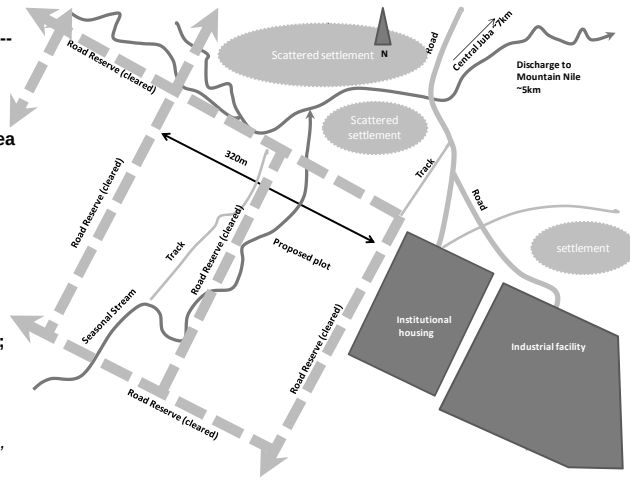
1: Site is in area already allocated for development---ecosystem integrity already disrupted.

2a: Key ecosystem service provided by the land is area drainage

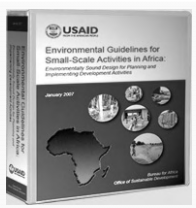
Implication: design must assure no reduction in stream capacity/alteration to local drainage patterns.

2b. likely domestic use of surface water just downstream of the facility; potentially shallow groundwater also.

Implication: must prevent additional siltation of stream, gray and brown water discharge, fuel leaks.



How do I learn about potential impacts and how they arise?



USAID's Environmental Guidelines for Small-Scale Activities in Africa

Covers more than 20 typical development sectors

Each sectoral write-up identifies **potential impacts & discusses how they arise.**

Impacts are matched to mitigation actions.

The **annotated bibliographies** provide links to key additional resources

Hardcopy provided.

Available in your e-materials and at www.encapafrica.org.

Where do I obtain information about the the baseline situation?

1. **YOUR ORGANIZATION TALK** to staff who know the project, and know the sites.

   OBTAIN project documents and information

2. **DIRECT OBSERVATION Go to the site(s)!** (look up publicly available satellite imagery before you go.)

3. **UTILIZE OTHER LOCAL TALENT & KNOWLEDGE** communities, government, counterparts

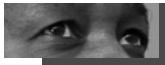
? Aren't we forgetting something?

What about reports by donor organizations and international agencies? What about government statistics? GIS databases?

All these sources can be useful (and sometimes necessary)

But good local information is the most important input

Why direct observation?



We need to **SEE**

- **Are latrines close to water supplies?**
- **Is there a drainage problem?**

Visual inspection is the quickest and best way to check issues of location, scale and proximity that determine many impacts.

We need to **LISTEN**

- **Is there a land tenure problem?**
- **How often does the river flood?**

Stakeholders and local communities have *local knowledge that you need.*

And, impacts depend on what those affected value and need!

! Talk to men AND **women.** Women's perceptions on environmental matters are critical and distinct.

! Wait!

What if I can't travel to the sites?

If at all possible, DON'T make the site characterization a desk exercise.

But if you can't visit the sites/area, you need:

→***MAPS*** *and* ***PHOTOS*** *to help you visualize the environment.*

→*to* ***TALK*** *to people who have been there*

Do I need tools to evaluate impacts?

Simple tools
- Checklists
- Matrices
- Networks
- Overlays

A number of simple tools exist to systematize field observations, think through potential impacts, and to help evaluate their significance.

Technical tools
- Cost-benefit analysis
- Multi-criteria analysis
- Risk assessment
- Simulation modeling

A number of more complex tools exist to predict and assess the significance of impacts in full EIA studies. (Used by specialized consultants.)

But in this workshop. . .

We focus on the simple logical process of impact evaluation, supported by the *Small-Scale Guidelines.* This is sufficient for most Kenya IP needs.

Mitigation and Monitoring

A critical part of the EIA process—and of environmentally sound design and management

✓ **Mitigation is. . .**

The implementation of measures designed to reduce the undesirable effects of a proposed action on the environment

✓ **Monitoring . .**

Environmental and activities measurements to tell you if your mitigation measures are:

1.Being implemented
2. Sufficient and effective

How does mitigation reduce adverse impacts?

Type of mitig measure	How it works	Examples
Prevention and control measures	Fully or partially prevent an impact/reduce a risk by: ▪ ***Changing means or technique*** ▪ ***Changing or adding design elements*** ▪ ***Changing the site*** ▪ ***Specifying operating practices***	PREVENT contamination of wells, by SITING wells a safe distance from pollution sources Add wastewater treatment system to the DESIGN of a coffee-washing station and train in proper OPERATIONS
Compensatory measures	Offset adverse impacts impacts in one area with improvements elsewhere	Plant trees in a new location to COMPENSATE for clearing a construction site
Remediation measures	Repair or restore the environment after damage is done	Re-grade and replant a borrow pit after construction is finished

… and sometimes you may need to redesign the project to modify or eliminate problem components

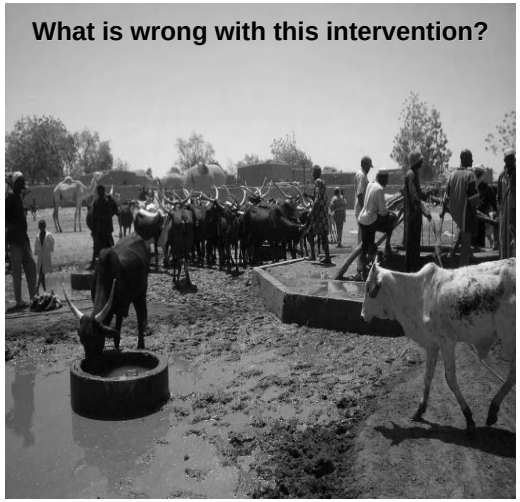
SITING & DESIGN FEATURES to PREVENT impacts

❖ **Water Supply (Well provision)**
- ***Potential impacts:*** *Contamination of water supplies; spread of disease*
- ***Mitigations needed:*** *Fence to keep out livestock*

Site away from contamination sources

Provide separate water point for livestock

What is wrong with this intervention?



Proper treatment system OPERATIONS

- **Agric Processing**
  (Coffee Washing)
  - ***Potential impacts:*** *Contamination of water supplies; excessive water draw*
  - ***Mitigations:***

    Wash water recycling

    Basic wastewater treatment (pictured)

  → **Proper treatment system *operation* is essential**

Must I mitigate EVERY impact?

Mitigation specified by the IEE/EA must be implemented

But often IEE conditions are general & require the IP to exercise judgment in designing specific mitigations. In this case, apply the following principle:

Prioritize!

Potentially serious impacts/issues → **These must ALWAYS be mitigated to the point that the impact is non-significant**

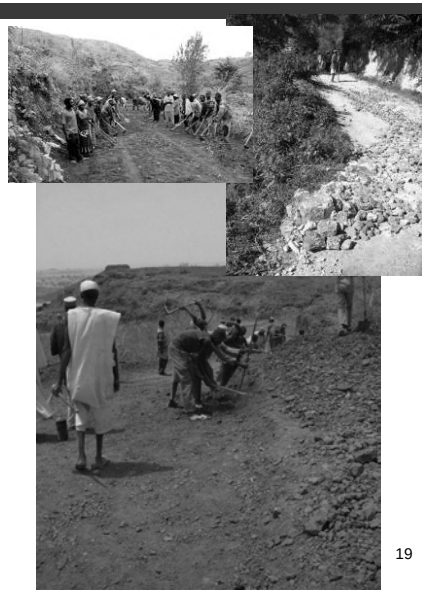
Easily mitigated impacts → **Then, there may be other impacts for which mitigation is easy and low-cost**

Effective mitigation usually requires a mix of mitigation techniques

Example: ROAD REHABILITATION

Some typical adverse impacts:

- **Alteration of natural watershed drainage**
- **Erosion of road surface materials into habitats, productive agricultural land**
- **Roadside Gully formation→ damage to adjoining land**
- **Dust→ respiratory problems, crop damage**
- **Inappropriate Extraction of materials for road surfacing**
- **Increase in disease transmission (HIV)**
- **Increased non-sustainable logging, charcoal extraction**



Combining mitigation techniques: Road rehabilitation

Some typical good-practice mitigations

Avoid steep grades, Follow contours	Siting
Culverts or Rolling dips for water drainage and diversion	Design elements
Side drainage to prevent flooding washout	Design elements
Slope stabilization via plantings, grading/terracing & riprap	Design elements
Dust reduction barriers	Design elements
Paving of vulnerable stretches	Design elements
Community Maintenance	Operating Practice
Grading/planting/draining borrow pits	Remediation

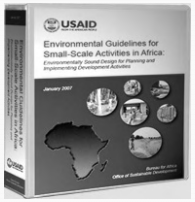
Photo: LOW-VOLUME ROADS ENGINEERING Best Management Practices Field Guide Gordon Keller & James Sherar

Prevention is best

✓ **Where possible, PREVENT impacts by changes to site or technique.**

CONTROL of impacts with Operation & Maintenance practices (O&M) is more difficult to monitor, sustain.

What is the best resource for mitigation design?



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EIA Practice Session & Getting Acquainted with the *Small-Scale Guidelines*: A Virtual Field Visit

Objectives

Practice the identification of environmental impacts and issues of concern and consider mitigation design in response to these impacts.

Gain working familiarity with the *Environmental Guidelines for Small-Scale Activities in Africa* as a technical resource in integrating ESDM and addressing issues of environmental compliance.

Format

- Briefing & desk preparation
- Virtual Field Visit
- "Back at the office" small group work

Summary

The previous session presented the basic theory of baseline characterization, impact evaluation, mitigation, and monitoring. This session practices these skills in case study form via a "virtual field visit." By using sector guidance from the *Environmental Guidelines for Small-Scale Activities in Africa* ("*Small-Scale Guidelines*") as a key resource, the session also builds familiarity with the *Guidelines* as a tool for addressing issues related to environmental compliance.

Scenario and Instructions.

We are making a "virtual field visit" to a completed school construction activity which may require corrective measures to assure environmental soundness.

Part 1: Desk Preparation.

Together, we will review the most important ways in which design and management of day schools can be environmentally UNsound. There are three principal ways:

1. adverse impacts of schools on environment (and thereby community and student health)
2. failure to design and site in response to local environmental conditions, with adverse effects on the learning environment, student health and facilities durability
3. failure to provide safe, adequate water supply

Based on this discussion, we will then **identify** together the most relevant elements of the baseline situation that we should assess on our "field visit." (That is, what information do we need in order to decide whether a potential ESDM "deficit" is real and significant in the case of a particular school?)

Note that as the school is already in operation, the baseline situation includes both the environment around the school *and* the school itself, including its facilities and their operation.

Part 2: Site visit

Then, we will take a short "site visit" in the form of a photo presentation.

The primary objective of the visit is to observe the key elements of the baseline situation identified in Part 1, above. We should also be on the lookout for hygiene or occupational safety and health issues that may not, strictly speaking, be environmental issues—but may nonetheless affect student or staff health and safety.

Part 3: Back at the office

We will divide into small working groups. Using the information from the site visit, each group will:

- **Review and characterize** the most relevant elements of the baseline situation, including ongoing environmental management efforts and measures (if any); and
- On this basis, decide which of the potential adverse impacts and other potential "ESDM failures" are real and present serious concerns; and
- Suggest corrective measures (mitigation) to address these issues.

Working groups should record their findings in bullet form. The Schools chapter of the *Small-Scale Guidelines* will be the key reference for potential impacts and mitigation measures. Facilitators will serve as resources throughout the process.

Note that:

- This session is intended to practice basic observation, impact identification and mitigation design skills—*not* to practice development of Reg. 216 environmental documentation.
- In addition, this is not a pre-implementation environmental review process; rather we are examining an activity already completed and suggesting corrective measures.

Thus (for those who already know these terms), working group outputs are ***not*** expected to be in the form of an IEE outline or phrased in terms of "recommended determinations."

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EIA Practice Session
&
Getting Acquainted with the *Small-Scale Guidelines*:
A Virtual Field Visit

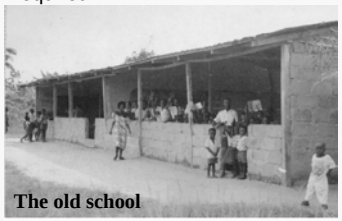
L-MEP Mainstreaming USAID Environmental Compliance Training Workshop
Monrovia, Liberia ▪ June 2011

Scenario & objectives

Scenario

A new primary school has been constructed in under-developed ABC town, replacing an inadequate previous structure

However, little attention was paid to environmental soundness & corrective measures may be required.



The old school

Objectives:
Identify environmental issues of concern

Propose corrective measures

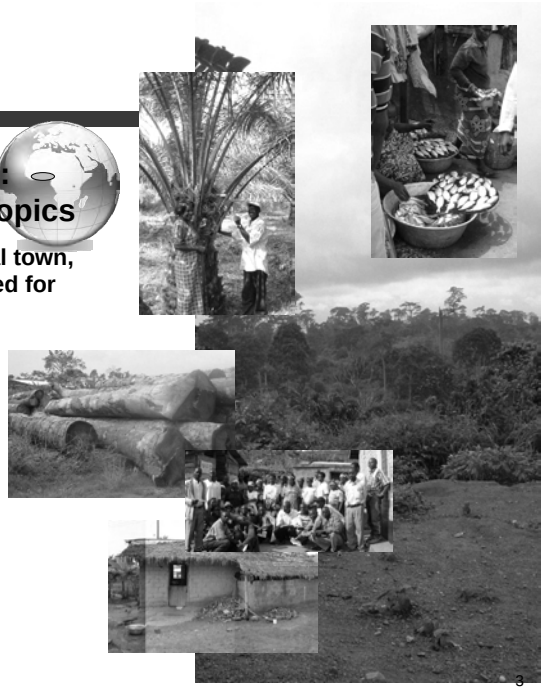
☞ *Using the impact evaluation process presented in the last session*

☞ *With reference to the impacts and mitigation guidance in the* Small Scale Guidelines.

About the case

Environmental Context:
West African Humid Tropics

Based on real facilities in a real town, but a number of details changed for study purposes



Basic orientation:
West African Humid Tropics

- **Climate:**
  Annual min/max temp: 18C-38C. Avg humidity: 50-80%. 2 rainy seasons; rainfall 85-220 cm/year; intense storms possible.
- **Geography:**
  Usually gently rolling.
  Very low earthquake risk
- **Diseases:**
  Malaria and a wide variety of tropical diseases are serious threats to public health.
- **Culture**
  60% Christian/30% Muslim/10% traditional; traditional beliefs widely practiced. High linguistic and tribal diversity. Some groups matrilineal.

Part 1

DESK PREPARATION: WHAT DO WE NEED TO EXAMINE IN THE FIELD?

How can design and management of day schools be environmentally UNsound?

Adverse impacts OF the school ON the environment

Surface and groundwater contamination; spread of pathogens and disease vectors.

(from inadequate/poorly managed latrines, waste, drainage.)

Erosion

(from inadequate/poorly managed drainage)

Local deforestation

(from inadequate/poorly managed latrines, waste, drainage.)

Failure to design & site responsive to local environmental conditions

Too noisy→ poor learning

Poor thermal perfomance (too hot)→ poor learning

Too dusty → student illness, poor learning

High pathogen, disease vector concentrations→student illness

Structural failure (from foreseeable storm, pests, quake)→ tragedy

Failure to provide safe & adequate water supply

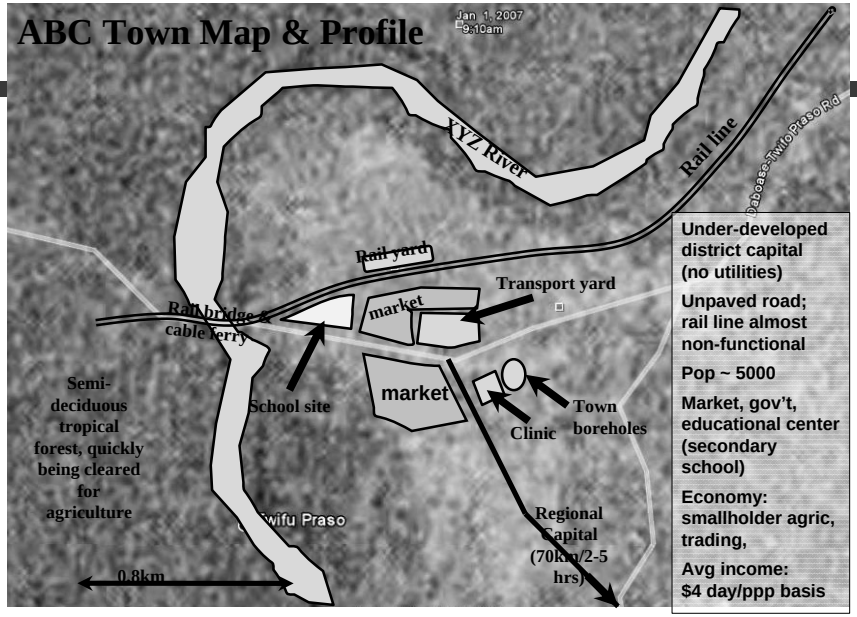
Poor learning, student illness

So what are the key aspects of the baseline situation to examine?

! as the new school is already built, it has become part of the baseline situation. So our baseline examination needs to include relevant elements of school design, siting, operations, etc.

PART 2:

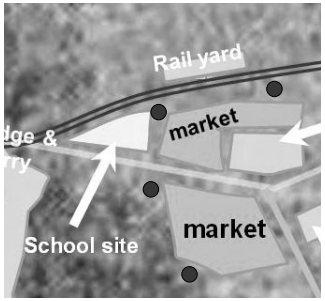
FIELD VISIT



ABC is a significant market center

- Retail and wholesale
- Purchase point for agricultural goods being taken to the regional capital
- Distribution center for smaller rural traders

Sanitation is a problem

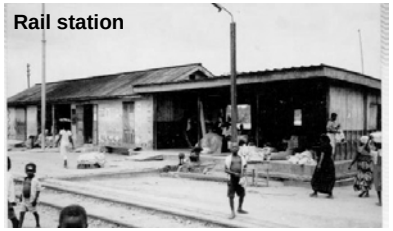


The market generates large amounts of waste, which is poorly managed. Observed waste piles (pictured) are noted on the map (red dots).

Public latrines are simple pit & too few. Some households have private latrines. A few of the wealthiest have bucket-flush toilets and septic tanks/ soakaways.

4 Town boreholes are located centrally and are the only source of safe water. Most households use shallow wells.

ABC lies on a key transit route



Ferry crossing; rail bridge at far left

Road is poor, but is a key conduit for agricultural goods.

Rail service is likewise poor, but supports transport of heavy/bulky goods (e.g. cement)

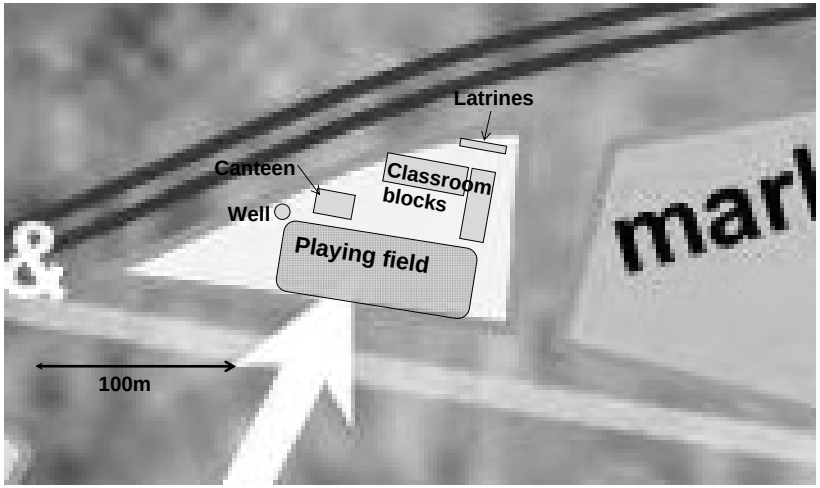
Significant deforestation

Area receives significant in-migration for agricultural land. Combined with commercial logging, forest is receding quickly. Local weather is changing; severe ground winds more frequent.

The new school

View from road, rail line lies behind

School site plan



School facilities

Canteen staff in the canteen. (Note 3-stone fire at left.)

Unimproved latrine block.

School facilities

Detail of roof construction.

**School well.
(shallow hand-dug; note cover and lock)**

Part 3

BACK AT THE OFFICE

"Back at the office" . . .

- **Based on your field observations, characterize the most relevant elements of the baseline situation**
- **On this basis, decide which of the potential adverse impacts and other potential "ESDM failures" are real and present serious concerns. •**
- **Suggestion corrective measures (mitigation) to address these issues.**
- **Key reference:
  Schools chapter of the *Small Scale Guidelines***

Plenary wrap-up

1. Report-out

**2. Discussion question:
*What changes with respect to impacts and good practices in YOUR local environmental context?***

Environmental Monitoring

Objective

Establish the objective of environmental monitoring (determining clearly and cost-effectively if mitigation is sufficient and effective); brief the two types of monitoring indicators & achieve a common understanding of the principles of monitoring design.

Format

Presentation

Summary

Definition. Environmental monitoring is both:

A. Systematic observation of key environmental conditions.

B. Systematic verification of the implementation of mitigation measures.

Environmental monitoring is a necessary complement to mitigation. Its purpose is to tell us clearly and cost-effectively if mitigation is sufficient and effective.

Throughout this session, we will see that environmental monitoring must be highly targeted.

A. Observing environmental conditions. The environmental conditions observed are those:

- That correspond to impacts and mitigation measures. For example, a key potential impact of an irrigation project is groundwater contamination. Therefore, **ground-water quality** is monitored.
- Upon which the project depends for its success. For example, a water supply project depends on clean source water. Therefore, **source water quality** is monitored.

We observe and measure environmental conditions by using **environmental indicators,** which are signals of or proxies for the stock and quality of key environmental resources, or of environmental health and ecosystem function.

Indicators can require complex equipment to measure (e.g. testing water for pesticide residues), but they can also be very simple—and often for small-scale activities simple indicators are best. (For example, groundwater levels can be measured in a shallow well using a rope and bucket.)

A key principle of monitoring is choosing the simplest indicator that meets your needs.

To distinguish the impacts of your activity from other factors, thought needs to go into the times and places that indicators are measured.

For example, consider an agricultural processing facility that draws water from a stream. The facility has potential to adversely impact surface water quality. A good monitoring approach would:

- Take water samples from the stream at the intake point and downstream from the seepage pits.
- Take samples from these different locations at the same time.
- Take samples during both high and low flow periods during the processing season.

B. Verifying Implementation of Mitigation Measures. We can verify (and quantify!) implementation of mitigation measures in two ways: via paper reports and via field inspection. In each case, we use **mitigation implementation indicators**. For example, monitoring of medical waste management in a clinics activity could ask the beneficiary clinics to attach their waste management plan. A field inspection would spot check that key elements of the plan were being implemented.

Good environmental monitoring is targeted and takes the simplest effective approach. It usually requires a combination of environmental conditions indicators and mitigation implementation indicators.

Key resource

The *Environmental Guidelines for Small-Scale Activities in Africa* is a key resource for design of mitigation and monitoring measures.

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Environmental Monitoring

L-MEP Mainstreaming USAID Environmental Compliance Training Workshop
Monrovia, Liberia ▪ June 2011

Definition of monitoring

Environmental monitoring is BOTH. . .

✓ **1. Systematic observation of key environmental conditions**

✓ **2. Systematic verification of mitigation measure implementation**

! **Purpose:** to tell you clearly and cost-effectively if mitigation is sufficient and effective

Env. Monitoring should be a normal part of project M&E.

Monitoring environmental conditions

1. Systematic observation of key environmental conditions

= Environmental conditions that:

- **correspond to impacts & mitigation measures**
- **Upon which the project depends for its success**

Example: an irrigation project may contaminate groundwater. **Ground-water quality** is monitored.

Example: A water supply project depends on clean source water. **Source water quality** is monitored.

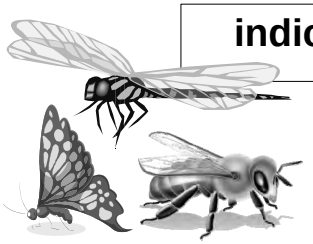
Monitoring environmental conditions

1. Systematic observation of key environmental conditions

Means that environmental indicators are chosen and assessed systematically.

indicators are

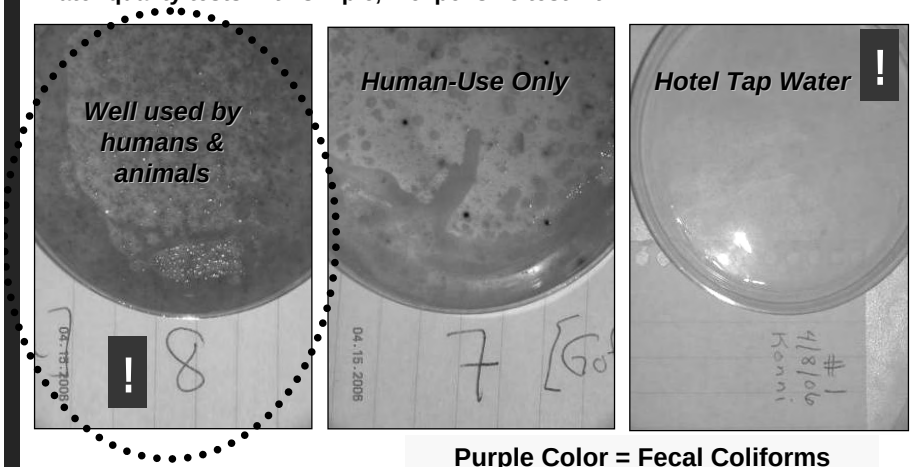
Signals of or proxies for
- **Environmental health**
- **Ecosystem function**



For example. . .

Example Indicator: coliform contamination

Water quality tests with simple, inexpensive test kit . . .



Purple Color = Fecal Coliforms
Pink Color = Non-Fecal Coliforms

Examples of indicators

Environmental components that may be adversely affected by small-scale activities

Water	*Quantity, quality, reliability, accessibility*	**Env Health**	*Disease vectors, pathogens*
Soils	*Erosion, crop productivity, fallow periods, salinity, nutrient concentrations*	**Flora**	*Composition and density of natural vegetation, productivity, key species*
Fauna	*Populations, habitat*	**Special ecosystems**	*Key species*

indicators

Environmental Indicators: sometimes complicated, often simple

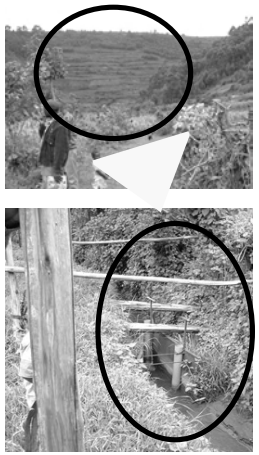
- **Environmental Indicators may require laboratory analysis or specialized equipment & techniques**
  - *Testing water for pesticide residues*
  - *Automatic cameras on game paths for wildlife census*
  - *Etc.*
- **But indicators are often VERY SIMPLE. . .**
- **! . especially for small-scale activities**

Simple indicators can be more useful and appropriate than more complicated ones!

For example. . .

Examples of simple environmental indicators

Erosion measurement.



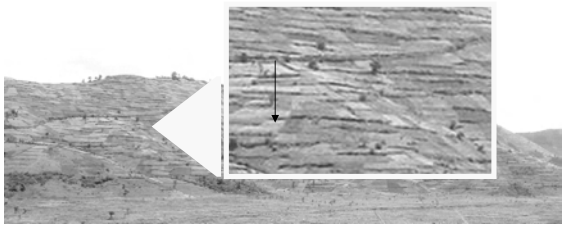
Topsoil loss from slopes upstream in the watershed **(top)** is assessed with a visual turbidity monitor **(bottom).**

Surface sewage contamination

Visual inspection behind the latrine **(top)** reveals a leaking septic tank **(bottom).**

What are the limitations of this indicator?

Examples of simple environmental indicators



Soil depletion.
Visual inspections show fertility gradients within terraces. (Dark green cover indicates healthy soil; yellow cover indicates depletion)

Groundwater levels
Are measured at shallow wells with a rope and bucket.

! Choose the simplest indicator that meets your needs!

Assessing environmental indicators systematically

- **Monitoring often requires SYSTEMATIC measurement of indicators to <u>distinguish the impacts of the activity from other factors</u>**

This requires decisions about:

1. **Location of measurement**
2. **Timing & frequency of measurement**

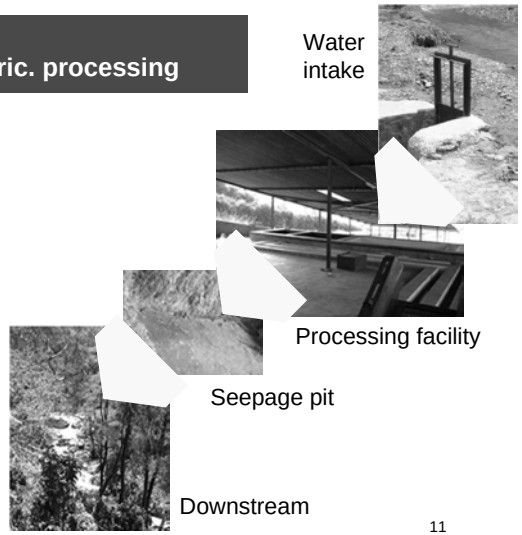
and often. . .

3. **Other factors**

For example

Assessing environmental indicators systematically

Example:
Water quality impacts of agric. processing



1. **Location**
Water samples should be taken at the intake, and downstream of seepage pits.

2. **Timing & frequency**
Samples at different locations should be taken at the same time. Samples should be taken at **high & low flow** during the processing season

3. **What else?**

Assessing environmental indicators systematically

Measuring water quality impacts from a point source of pollution (the previous example) is fairly straightforward

Often monitoring can be more complicated.
Some common monitoring strategies:

Monitor the actual project, plus a similar non-project area (a "control")

Monitor at multiple stations/ sampling locations

Do research to obtain good baseline data

All are intended to help distinguish impacts from NORMAL VARIABILITY and other factors

Monitoring: Part 2

2. Systematic verification of mitigation measure implementation

=

Verifying whether or not the mitigation measures specified by the EMMP have been implemented. This includes quantifying mitigation: how may staff trained? How many trees planted?

This will often not show whether the measures are effective. This is the role of environmental indicators.

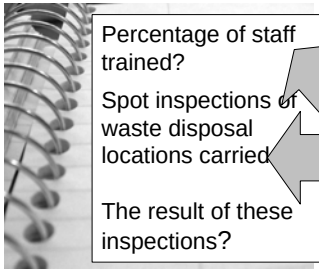
There are two basic ways to get the information required: paper reports & field inspection

For example

Ways to quantify implementation of mitigation

Mitigation measure is:
"Clinic staff shall be trained to and shall at all times segregate and properly incinerate infectious waste."

Desk assessment:
Clinics are asked to report:



Percentage of staff trained?

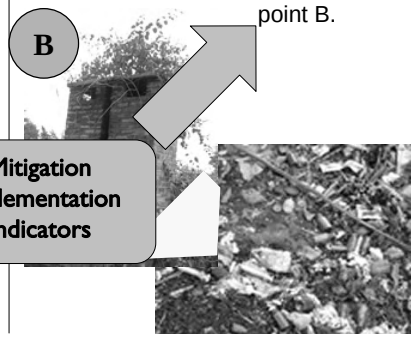
Spot inspections of waste disposal locations carried

The result of these inspections?

Mitigation implementation indicators

Field inspection. . .

shows waste is segregated at point A, but not incinerated at point B.

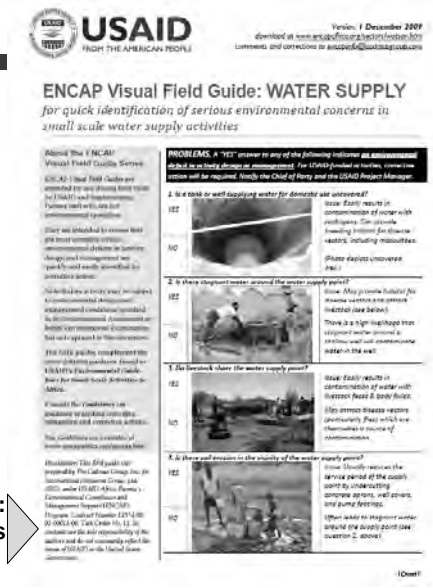


Good environmental monitoring. . .

. . .tell you clearly and cost-effectively if mitigation is sufficient and effective

- **Do no more than needed. Prioritize the most serious impacts & issues**
- **Usually requires a combination of:**
  - *Environmental conditions indicators*
  - *Mitigation implementation indicators*

Example: ENCAP visual field guides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ENCAP Visual Field Guide: WATER SUPPLY

for quick identification of serious environmental concerns in small scale water supply activities

Making Mitigation & Monitoring effective

For mitigation and monitoring to be effective, it must be:

Realistic.
M&M must be achievable within time, resources & capabilities.

Targeted.
Mitigation measures & indicators must correspond to impacts.

Funded.
Funding for M&M must be adequate over the life of the activity

Considered early.
Preventive mitigation is usually cheapest and most effective. Prevention must be built in at the design stage.

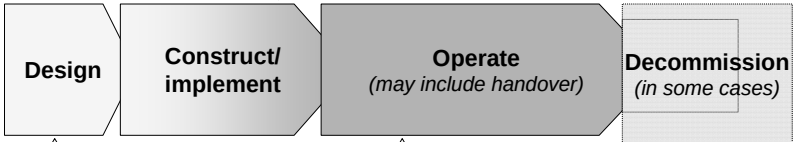
Considered early.
If M&M budgets are not programmed at the design stage, they are almost always inadequate!

Mitigation & monitoring in the project lifecycle

Mitigation and monitoring is a part of each stage of any activity.

1. Implementation of design decisions. Monitoring of construction

*2. Where required, **capacity-building** for proper operation*



1. Decisions made regarding site and technique to minimize impacts

2. Operating practices designed

1. Operating practices implemented

2. Monitoring of:

- *Operating practices*
- *Environmental conditions*

Introduction to Environmental Mitigation and Monitoring Plans (EMMPs)

Objective

a. Brief the EMMP concept.

b. Establish that EMMPs are critical to effective and systematic implementation of IEE/EA conditions.

c. Explain the mechanisms by which USAID/Liberia is requiring IPs to develop and implement EMMPs.

Format

Presentation with mini case study

Summary

The concept. Environmental Mitigation and Monitoring Plans (EMMPs) are a framework for specifying and organizing mitigation and monitoring, and assuring that it responds systematically to IEE/EA conditions.

In their most basic form, EMMPs are a simple table that sets out:

- ALL the mitigation measures being implemented in response to IEE/EA conditions
- The monitoring that will determine whether the mitigation is sufficient and effective.
- Who is responsible for both mitigation & monitoring.

EMMPs may also include **budgeting** information for mitigation and monitoring and a **monitoring log section where** monitoring results can be recorded. We illustrate the EMMP concept at the end of the session with an extended example.

USAID/Liberia requiring EMMPs. USAID's environmental procedures require that environmental mitigation required by IEEs and EAs is implemented and monitored, but do not require EMMPs *per se*. However, all new USAID/Liberia IEEs do require that EMMPs be developed and implemented. This requirement can be operationalized either as technical direction from the C/AOTR or as a provision of new contracts and agreements.

(Title II Cooperating Sponsors are required to develop EMMPs by the Agency's MYAP guidance.)

EMMPs are being required because a key lesson learned from 40 years of EIA experience world-wide is that it is almost impossible to systematically carry out the mitigation measures that result from the EIA process unless an EMMP exists, and is incorporated into a project's workplan and budget.

EMMP requirements written into agreements and contracts. For new awards and significant modifications to existing awards, USAID/Liberia (and other Missions and Bureaus) are increasingly requiring EMMPs in the language of award instruments. This is part of a broader trend within USAID to use "best practice" environmental compliance language in solicitations and awards.

This language goes beyond the minimum requirement established by the ADS that mitigation measures be incorporated into "implementation instruments." It requires that: (1) a complete EMMP be developed; (2) workplans and budgets integrate the EMMP; and (3) project reporting tracks EMMP implementation.

The source of this "best practice language" is the *Environmental Compliance: Language for Use in Solicitations and Awards* (ECL) tool. This tool is a non-mandatory part of the ADS, and combines step-by-step guidance and "boilerplate" language. The Africa Bureau Environmental Officer strongly encourages its use.

EMMP submission and approval. EMMPs are approved by the C/AOTR; sometimes there is additional review by the MEO or REA. C/AOTRs generally require that they are submitted together with the project's workplan or PMP.

[Title II Partners submit them as part of the IEE, itself a part of the MYAP package.]

Key Resources (all included in Training Manual)

Simple EMMP Template

EMMP Template with Monitoring Log and Budget

Environmental Compliance: Language for Use in Solicitation and Awards (ADS 204 Help Document)

Introduction to Environmental Mitigation & Monitoring Plans (EMMPs)

L-MEP Mainstreaming USAID Environmental Compliance Training Workshop
Monrovia, Liberia ▪ June 2011

Congratulations…

✓ **We are all Mitigation and Monitoring Experts!**

❖ **Now, we must apply our knowledge**

- *IEEs (and EAs) are useless unless the conditions they establish are implemented!*
- ***USAID's environmental procedures therefore require implementation***

Review: Key LOP Env. Compliance Requirements

What does the ADS say?

Team Leaders and Activity Managers or C/AOTRs must actively manage and monitor compliance with any IEE/EA conditions, modifying or ending activities not in compliance. (ADS 202.3.6 , 204.3.4 and 303.2.f

Implementation of IEE/EA conditions

Practically, implementation & monitoring of M&M conditions requires that:

1. USAID communicates applicable IEE/EA conditions to the IP*
2. Complete **Environmental Mitigation and Monitoring Plan** (**EMMP**) exists
3. Workplans and budgets integrate the **EMMP**
4. Project reporting tracks **EMMP** implementation

EMMPs are critical.

What are they?

Except Title II partners, who write their own IEEs.

EMMPs: Simple in concept

Basic EMMP template

An EMMP sets out:

- ALL the mitigation measures required by the IEE/EA
- indicators or criteria for monitoring their implementation & effectiveness
- who is responsible for mitigation & monitoring.

To determine if mitigation is in place and successful

(i.e., visual inspection for leakage around pit latrine; sedimentation at stream crossing, etc.)

From IEE, include only activities with conditions

For mitigation, and for monitoring and reporting. (May be different)

Activity	Adverse Impacts	Mitigation Measure	Monitoring Indicators/ Criteria	Monitoring & Reporting Schedule	Responsible Party(ies)

See EMMP template in sourcebook

If well-specified, quote directly from IEE
If not well-specified in IEE, define more specifically

(e.g.., monitor weekly, report in quarterly reports and more frequently under specified conditions)

Implementation of IEE/EA conditions

More sophisticated EMMP formats can include:

1. Budgeting information---how much will a mitigation or monitoring measure cost? What is the LOE involved
2. A Monitoring Log section—where mitigation implementation information/the results of monitoring
3. Etc.

We will use an EMMP format with these features

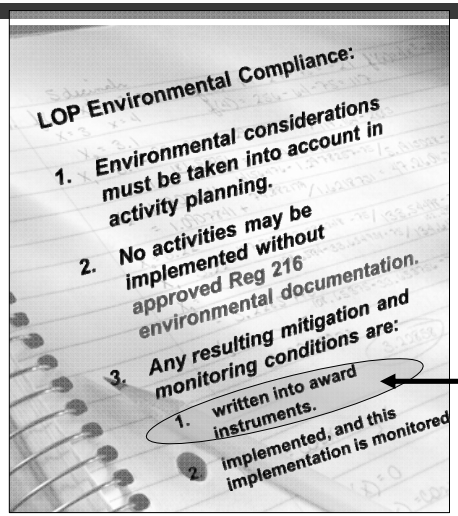
How are EMMPs being required?

Three mechanisms:

1. Technical direction from C/AOTR
2. Required by contract/agreement *More about this...*
3. Required by MYAP guidance (Title II only)

! A key lesson learned from 40 years of world-wide EIA experience: implementation of env. conditions requires EMMPs that are incorporated in workplans and budgets

USAID is Required to Write IEE/EA Conditions into Awards



ADS requires "incorporating. . . mitigative measures identified in IEEs [and] EAs into implementation instruments for programs, projects, activities or amendments."

(204.3.4.a.6; *also 303.3.6.3e*)

Increasingly USAID is using best-practice environmental compliance language beyond the ADS minimum

New awards and significant modifications are requiring that:

1. *The partner verifies current and planned activities annually against the scope of the RCE/IEE/EA.*
2. *The **necessary mechanisms and budget** for partner implementation of IEE/EA conditions are in place*

To assure that projects do not "creep" out of compliance as activities are modified and added to over their life.

Specifically:

1. Complete EMMP exists/is developed.

2. Workplans and budgets integrate the EMMP

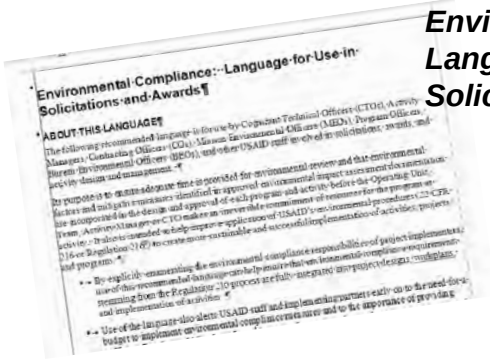
3. Project reporting tracks EMMP implementation

And new solicitations require that

Proposals address **qualifications and proposed approaches to compliance/ ESDM** for environmentally complex activities.

Source of best-practice language

(almost) new


Environmental Compliance: Language for Use in Solicitations and Awards¶

ABOUT THIS LANGUAGE¶

Environmental Compliance: Language for Use in Solicitations and Awards (ECL)

- ✓ **An ADS "Additional Help" document**
- ❖ **Easy step-by-step guidance and "boilerplate" language**
- ✓ **For RFAs/ RFPs/ agreements/ grants/ contracts**
- ✓ **Optional— but its use being strongly encouraged**

Hardcopy in your sourcebook.

Also available from www.usaid.gov/policy/ads/200/204sac.pdf

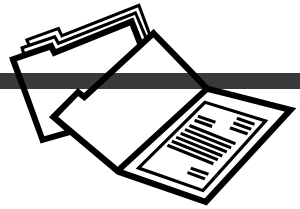
In addition to improving LOP compliance and better achieving ESDM. . .

The ECL benefits both Mission Staff & partners:

USAID Mission Staff	Implementing Partners
Assures that environmental monitoring and reporting is integrated into routine activity monitoring and reporting—reduces the cost and effort of verification/oversight.	Provides clarity regarding environmental compliance responsibilities
Avoids the effort, costs and loss of good will that come from imposing "corrective compliance" measures after implementation has started.	Prevents "unfunded mandates"—requirements to implement M&M after implementation has started & without additional budget.

! Missions and centrally funded programs are increasingly using the ECL. Partners should expect that future solicitations and awards will incorporate ECL-based environmental compliance language

How are EMMPs approved?



EMMPs must be approved by the C/AOTR

Usually submitted & approved with the workplan or PMP

(For Title II, sometimes submitted as part of the IEE, with the MYAP.)

Sometimes additional review by the MEO or REA.

EMMP example:
Irrigation Rehabilitation

PROJECT BRIEFING:

System reconstructed early 1980s

Abstracts water from high-level river source and irrigates 140 Ha (2 parcels; valley & hillside lands)

One dam is made of brush, straw, soil, and stone

The other is made of stone and soil

Water source low in salts; soil salinization potential is minimal.

Diversion works at the head of the system

EMMP example:
Irrigation Rehabilitation

PROJECT BRIEFING:

Canals used for many purposes: irrigation, bathing, drinking water, laundry. . .

At the end of the dry season, not enough water for all plots

During heavy rains, canals fill with sediment from hillside erosion—result: not enough water for all plots.

No adjacent wetland nor critical wild life habitat.

Doing laundry in the canal

EMMP example:
Irrigation Rehabilitation

Surrounding hillside is completely deforested

PROJECT BRIEFING:

The canals are hand made and carry open water from upstream

Roads: In poor condition—difficult to get crops out.

System maintenance committee not functional

Water distribution: Land registration to receive irrigation water was done in early 1980's. No new plots can be registered (but theft from the system is possible.)

! There are many baseline issues that are not impacts of the rehabilitation, but should be addressed in the EMMP

EMMP example:
Irrigation Rehabilitation

Impacts/Baseline Issues & Mitigations

(Excerpt—summary language)

Sub-activity or component	Description of Impact/Baseline Issue	Mitigation Measures	#
Dam & primary canals re-construction /replacement & subsequent operation	Flooding of irrigated areas/damage to system during high-flow events	Design so that excess of water won't damage systems (excess flow diversion, removable dam etc….)	1
	Soil erosion from hillsides and secondary/tertiary canals	Install & properly operate flow regulation structures for secondary canals	2
		Protect upper slope with fruit trees (mangoes, citrus, avocado) and native forest trees	3
	Water losses (from evaporation and leaching but also from canal blockage from dirt, debris etc….)	Line primary canals with concrete	4
		Train water committee on heavy rain after-maintenance	5
	Health issue (drinking irrigation water because it appears cleaner)	Community education on water quality/use/management Water committee to enforce use restrictions	6
	Water contamination from animals, construction	Provide separate water points for construction washing stations and animal watering	7
	Social impact of inequality of water use increasing # of people using the water	-Existing water committee reinforcement -Land Registration	8
Road rehabilitation: bridges & drainage works	Increased Deforestation (due to increased ease of access)	Work with local officials to control deforestation	9
	Increased sedimentation from enhanced road drainage	Sedimentation control (silt screen and hay bails- local weeds)	10

And finally. . .the EMMP itself

(Uses a Title II format that includes a monitoring results log.)

EMMP example:
Irrigation Rehabilitation

EMMP & Monitoring Log
(Excerpt)

Mitigation Measure	Responsible Party	Monitoring Scheme			Est. Cost	Monitoring Log		
		Indicators	Data source/ Method	How Often		Date	Result	Follow-up
2. Install & properly operate canal-level flow regulation structures	Project agricultural technician	• # of doors and other flow-control structures installed •% of Ha. under flow control •% of secondary & tertiary canals showing significant erosion damage after each growing season	Reports Field visit	Quarterly				
3. Protect upper slope with fruit (mangoes, citrus, avocado) and forest trees	Project agricultural technician	# of trees planted and survived • % of at-risk upper slope land protected • total m3 of sediment removed from canals over each rainy season.	Reports Field visit Comparison with baseline information	Quarterly /Annual				
4. Line primary canals with concrete	Engineering Contractor	•% of primary canals lined with concrete. •# of additional hectares irrigated	Reports Field visit Comparison with baseline information	Quarterly				

Translating Environmental Impacts into Mitigation Measures

Objective

Understand by example basic principles and approaches for translating general IEE conditions into specific mitigation actions.

Format

Presentation and discussion

Summary

IEE conditions are often written very generally. For example, an IEE might specify that "wells shall be sited to minimize the possibility of contamination." (Or even more generally: wells shall be sited and constructed consistent with good practices.")

Implementing this IEE condition (which begins with developing an EMMP) requires that it be translated into specific mitigation actions.

In this case, the project would need to develop or adopt a set of specifications for well location that can then be referenced in the EMMP.

For example, the project might adopt the following, based on the *Small Scale Guidelines:*

The following MINIMUM distances from potential sources of contamination will be observed for well siting:

- 150 ft (45.7 m) from a preparation area or storage area of spray materials, commercial fertilizers, or chemicals that may cause contamination of the soil or groundwater.
- 100 ft. (30.5 m) from a below-grade manure storage area.
- 75 ft (22.9 m) from cesspools, leaching pits, and dry wells.
- 50 ft (15.2 m) from a buried sewer, septic tank, subsurface disposal field, grave animal or poultry yard or building, privy, or other contaminants that may drain into the soil.
- The distance between a septic tank leach field and a down-gradient well should be greater than 100 ft (30.5 m) if the soil is coarser than fine sand and the groundwater flow rate is greater than 0.03 ft/day (0.01 m/day).[2]

The EMMP could then list the concrete mitigation action as "compliance with project well siting criteria," and attach those criteria as an Annex.

In this session, we will work through a set of actual examples of "general IEE conditions" and discuss as a group how to translate them into specific mitigation actions.

[2] Source: Driscoll, Groundwater and Wells, Second Edition, as cited in the *Small Scale Guidelines.*

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Translating Environmental Impacts into Mitigation Measures

L-MEP Mainstreaming USAID Environmental Compliance Training Workshop
Monrovia, Liberia ▪ June 2011

The Issue:
Extremely General IEE Conditions

- ❖ IEE conditions are often written very generally
- ❖ Implementing these conditions requires first translating them into specific mitigation actions

How do we do this?

For example:

"wells shall be sited to minimize the possibility of contamination."

Or even more generally:

"wells shall be sited consistent with good practices."

The Basic Approach:
Refer to Appropriate Standards or Best Practice Guidance

For our well example:

- ❖ Identify & adopt siting criteria from appropriate standards or best practice guidance
- ❖ The concrete mitigation action in the EMMP is:

  "Compliance with project well-siting criteria"
- ❖ Attach siting criteria to EMMP; make checklist for use by field teams and M&E staff.

Host country standards

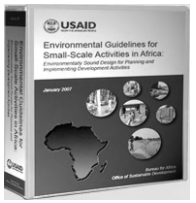
National Water Resources Board

Sphere standards

Small-Scale Guidelines

ETC.

Well siting criteria
from the *Small-Scale Guidelines*

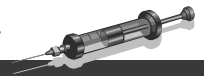


MINIMUM distances from potential sources of contamination for well siting:

- ❖45 m from a preparation or storage area for agrochemicals , fuels, or industrial chemicals.
- ❖25m from cesspools, leaching pits, and dry wells.
- ❖15m from a buried sewer, septic tank, subsurface disposal field, grave animal or poultry yard or building, latrine pit, or other contaminants that may drain into the soil.
- ❖More than 45m from a septic tank leach field

Let's discuss some other examples:

Example 2: Health Services Capacity & Policy



"Capacity-building and policy development support to public health delivery & management systems must involve all feasible efforts to assure that these systems:

- ❖address and support proper waste management (including handling, labeling, treatment, storage, transport and disposal of medical waste)
- ❖address and support the capacity of medical facilities for waste management;
- ❖prioritize environmental health considerations"

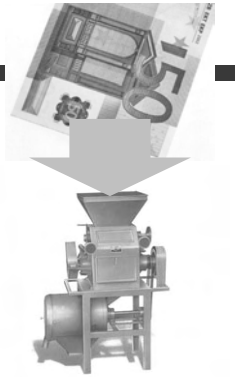
Requires identifying an appropriate waste management standard & specifying what is feasible, given that the project will not have direct control over these systems.

Example 3: Direct Financial or Technical Assistance to Agroprocessing Enterprises

"Existing enterprises/facilities receiving direct USAID support will be reviewed to identify any significant environmental management deficiencies and these deficiencies promptly corrected."

Example 4: Strengthening Finance for Micro & Small Enterprises

Financial Institution capacity-building shall incorporate basic environmental due diligence concepts and development of appropriate due diligence processes, to include screening both for environmental compliance and for enterprises that represent high environmental risks.



Reporting Environmental Compliance Progress and Concerns

Objectives

Achieve a common understanding of the two basic elements of environmental compliance reporting: (1) providing USAID with an auditable record of IP environmental compliance; and (2) "mainstreaming" critical elements of environmental soundness/compliance into one or more core program performance indicators.

Format

Presentation.

Summary

In addition to systematically complying with IEE/EA conditions by developing and implementing EMMPs, USAID/Liberia implementing partners must report to USAID on their environmental compliance. For IPs that have one or more activities subject to a negative determination with conditions, there are two requirements:

1. **Project reporting must provide an auditable record of environmental compliance.**

   Specifically, quarterly or semiannual reports should contain a separate environmental compliance section. The section must provide sufficient information on the status of EMMP implementation for USAID to effectively fulfill its oversight and performance monitoring role. (C/AOTRs are required by the ADS to actively manage and monitor compliance with any IEE/EA conditions.)

   If the EMMP contains a "monitoring log" section, then the EMMP itself, updated with current monitoring results, can simply be appended to the report.

   For large projects with complicated EMMPs, a text summary/short analysis of EMMP implementation is needed. This should highlight key mitigation activities underway in the reporting period, any significant issues encountered, and corrective actions/adjustments made.

   Any specific reporting requirements imposed by the IEE or EA must also be satisfied.

1. **One or more key project performance indicator(s) (project results framework) must reflect overall environmental soundness/ environmental compliance.**

   In other words, the most critical elements of environmental soundness/ compliance must be "mainstreamed" into the project results framework. 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."

   In both cases, the "environmentalized indicator" demonstrates the core project activities are being executed with attention to environmental soundness/compliance. It is NOT necessary or appropriate to "environmentalize" every key indicator, or to capture every mitigation measures.

(This requirement applies to new awards. Where EMMPs are developed after the PMP is established, it may not be possible to change key performance indicators.)

USAID will not rely on IP progress reports alone to track environmental compliance. Field visits at minimum will include a quick check for significant environmental design/management problems. For environmentally complex activities, specific field visits may be made to verify EMMP implementation.

In summary Partner and USAID environmental compliance roles and responsibilities are as follows:

Project stage	Implementing Partner	USAID
Workplan & PMP Development	Develops EMMP Integrates EMMP into budget & workplan. Determines environmental compliance reporting	Prior review and approval of: 4. the EMMP (for responsiveness to IEE/EA conditions & sufficiency of monitoring); 5. The budget/workplan (to verify that EMMP implementation is planned and funded); and 6. The reporting framework to assure that environmental reporting requirements are met.
Implementation	Implementation of EMMP. Reporting on EMMP implementation	Ongoing review of partner progress reports to monitor EMMP implementation Field visits—at a minimum, all visits integrate a quick check for significant environmental design/management problems. For environmentally sensitive activities, specific visits may be made to verify EMMP implementation.

Reporting Environmental Compliance Progress and Concerns

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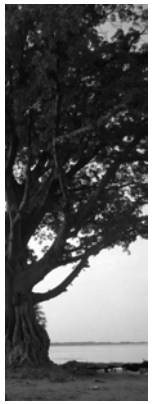
Monrovia, Liberia ▪ June 2011



So you have a high-quality EMMP AND are implementing it rigorously. . .

USAID needs to know.*

1. *Project reporting must provide an auditable record of environmental compliance*
2. *One or more key project performance indicator(s) (project results framework) should reflect overall environmental soundness/ env compliance.*

*** ADS requires C/AOTR to actively manage and monitor compliance with any IEE/EA conditions.**

Let's look at #1 first:

"Project reporting must provide an auditable record of environmental compliance"

Quarterly or semiannual reports should contain a separate environmental compliance section.

The section must provide sufficient information on the status of EMMP implementation for USAID to effectively fulfill its oversight and performance monitoring role

(In addition, IEEs may contain specific reporting requirements that must be addressed.)

Note: Title II CSs must submit an Annual Environmental Compliance Status Report.

If the EMMP contains a "monitoring record" section:

The EMMP itself, updated with current monitoring results, can simply be appended to the report.

Design requirement	Incorporated in final technical specifications: Date Confirmed	Incorporated in final technical specifications: Initials	Built-as specified? (confirmed by field inspec.): Y/N	Built-as specified? (confirmed by field inspec.): Date of inspection	Built-as specified? (confirmed by field inspec.): Initials	Notes (Issues & resolution)
GRADING, SEPTIC & DRAINAGE. If construction results in substantially increased slope of any land within 10m of the stream, that slope must be protected with berms, plantings, etc.)						
Site grading and drainage shall be designed and constructed to prevent accumulation of standing water						
Aprons must be installed and drainage provided at water supply point(s)—no standing water allowed.						
No direct gray or brown-water discharge to stream is allowed. All drainage with the exception of storm runoff and water point drainage must be channeled to the septic system.						
If septic tank design is a pump-out tank without leach field, assure impermeable tank construction or min 30m separation between tank and stream and nearest shallow well.						

Excerpt of EMMP with monitoring record for medium-scale construction project.

If the EMMP contains a "monitoring record" section:

The EMMP itself, updated with current monitoring results, can simply be appended to the report.

Mitigation Measure	Responsible Party	Monitoring Scheme			Est. Cost	Monitoring Log		
		Indicators	Data source/ Method	How Often		Date	Result	Follow-up
3. Install & properly operate canal-level flow regulation structures	Project agricultural technician	• # of doors and other flow-control structures installed •% of Ha. under flow control •% of secondary & tertiary canals showing significant erosion damage after each growing season	Reports Field visit	Quarterly				
4. Protect upper slope with fruit (mangoes, citrus, avocado) and forest trees	Project agricultural technician	# of trees planted and survived • % of at-risk upper slope land protected • total m3 of sediment removed from canals over each rainy season.	Reports Field visit Comparison with baseline information	Quarterly /Annual				

The irrigation rehabilitation EMMP from the "Intro to EMMPs" session

- **For large projects with complicated EMMPs, a text summary/short analysis of EMMP implementation is needed.**
  - *Highlight key mitigation activities underway in the period, any significant issues encountered, and corrective actions/adjustments made.*

Now on to requirement #2:

"Mainstreaming" environmental issues into the project results framework

"One or more key project performance indicator(s) (project results framework) should reflect overall environmental soundness & compliance."

This does NOT mean that:

•Every mitigation measure must be captured in core indicators

•Every core program indicator must be "environmentalized"

This IS to say that *overall*, project success must be partly measured on the most critical elements of environmental soundness/ compliance

This applies to new awards.

Where EMMPs are developed after the PMP is established, it may not be possible to change key program indicators.

"Mainstreaming" environmental issues into the project results framework

EXAMPLE: Water Point Provision

Key Program Indicators:

- **Protected* water points established**
- **# beneficiaries receiving water from protected water points**
- **% of water points with no fecal coliforms per 100 ml**
- **% of water points established that are clean after 6 months**

*** Protected = fenced against livestock, drained**

Again, this intervention will NOT show good performance. . .

"Mainstreaming" environmental issues into the project results framework

EXAMPLE:
Food for Peace

How much firewood does a typical Food for Peace (FFP) program use?

~1 kg firewood/person/day x 70,000 beneficiaries x 365 d

~30,000 MT of firewood /yr

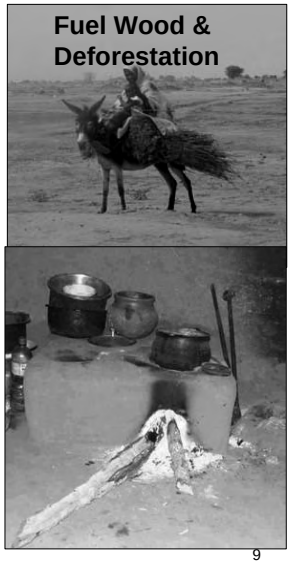
Mitigation:
Improved cookstoves and cooking practices

Added to key program indicators :

- **Amount of fuel saved by improved practices**
- **Amount of time saved by improved practices**

NOT just number of stoves distributed

Fuel Wood & Deforestation



"Mainstreaming" environmental issues into the project results framework

EXAMPLE:
Road rehabilitation

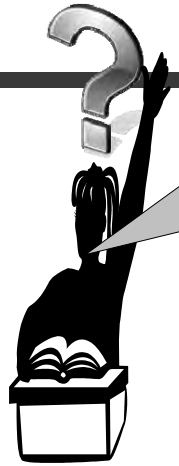
Typical Indicator:

- **Km of road rehabilitated**

Strengthened, "Environmentalized" indicator:

- **Km of road rehabilitated under environmentally sound practices.***

***provide definition of environmentally sound practices from EMMP**



Who reviews EMMPs & environmental compliance reporting inside USAID?

Will environmental compliance checks be part of Mission M&E?

The A/COTR reviews and approves the EMMP. The MEO (and sometimes REA) provides review support.

The A/COTR is responsible for requiring corrective action for non-compliance. M&E function supports compliance monitoring.

Environmental Compliance Verification/Oversight by USAID

1. Prior Review/Approval of partner-developed → **EMMP→** **ensure responsive to IEE/EA conditions** → **Budgets and workplans→** **ensure EMMP implementation planned & funded** → **Project Reporting Framework→** **ensure environmental compliance reporting requirements are met**	**Primary responsibility for ensuring compliance lies with C/AOTR.** MEO will also review/clear where activities are env. sensitive and/or IEE/EA conditions are complex.
2. Ongoing review of partner progress reports to monitor EMMP implementation	MEO on distribution list for IP's quarterly/semi-annual project reports.
3. Field visits: → **at a minimum, all visits integrate a quick check for significant env. design/management problems** → **For environmentally sensitive activities, specific visit(s) to audit against EMMP.**	Most field visits are by M&E function (L-MEP). C/AOTR should visit where possible. MEO should visit the most environmentally sensitive activities (REA may assist)

EMMP Development
(includes virtual field visit)

Objectives
Integrate, build and apply all skills required for EMMP development using mentored field observations as the basis for a practical EMMP design exercise.

Format

- Briefing & virtual field visit
- Teams work on EMMP & EMMP presentation
- Team presentations & wrap-up discussions.

  (Time limit per team to be provided by training team)

Summary/Scenario

From the preceding sessions, we understand the EMMP concept and its critical function as an organizing framework for systematic implementation of IEE and EA conditions. Earlier in the workshop, we developed the core EIA skills required for development of an EMMP.

In this session, we will integrate and further strengthen these skills by developing an EMMP in a scenario-based, small-team exercise. The session includes a photo-based virtual field visit, which provides the observations that inform EMMP development.

Teams and Sites. We divide into small groups. The small groups will work on one of the two exercises provided:

- A smallholder irrigation scheme rehabilitation & expansion project
- A district hospital rehabilitation project.

Exercise/Scenario. Each team plays the role of a prime contractor (IP) that is adding a major component to an existing project and is now in the workplan /PMP development stage. The component is subject to IEE conditions that the IP must implement.

Per USAID/Liberia policy, the IP must submit an EMMP to accompany the workplan or PMP, and the workplan and budget must provide for EMMP implementation.

The team makes a virtual visit (a photo-based presentation) to the site for their hypothetical project.

Informed by its field observations, each team will return to the "office" and develop an EMMP responsive to IEE conditions. Each team will then present this EMMP in plenary.

Important notes. *As is often the case, the IEE conditions are quite general. Therefore, as part of EMMP development, the team must translate them into more specific mitigation measures that are responsive to field conditions.*

Because time will not be sufficient to develop a full EMMP, teams are provided with only a few IEE conditions, and are expected to carry the EMMP to completion for these conditions. That is, the teams will need to translate each condition into specific mitigation measures, identify appropriate monitoring, and estimate budget and resource requirements for both the mitigation and the monitoring.

Instructions

A. Briefing & Virtual Field Visits

The training team will brief both the overall EMMP development exercise and take the teams through the virtual field visits.

B & C. Team Working Sessions

Immediately following the briefing and virtual field visits, teams will begin EMMP development. Most of this time is likely to be spent reviewing the project briefings and IEE conditions, and examining mitigation guidance in the *Small-Scale Guidelines.*

Teams will have additional time following the lunch break to spend on EMMP development.

EMMPs must be responsive to (1) the provided IEE conditions, and (2) the realities observed in the field.

Teams will work on laptops (if available), using the EMMP templates provided.

D. EMMP Presentations & Wrap-up discussion

Each group will present its EMMP *and* identify the information to be reported to USAID.

The training team will provide the time limit for the presentations.

Project Briefing 1:
Small-holder Irrigation Rehabilitation & Expansion.

USAID/XXX's Smallholder Agricultural Productivity and Market Access Program (SAPMA) is a 5-year, $50mn program to boost smallholder agricultural productivity with improved varieties and cultivation practices, and to support cooperative processing & marketing. The program is considered critical to food security and to enhancing economic opportunities (and thus to supporting political stability) in key rural provinces. SAPMA is now 2 years into implementation.

SAPMA was designed with the intent that improved varieties and practices would be applied to existing smallholder plots. However, implementation experience to date shows that lack of irrigation infrastructure is a key barrier to smallholder productivity in the target rural provinces.

An additional smallholder irrigation scheme component is therefore being added to SAPMA. In the current phase, time and funding is sufficient only for a single pilot activity; however in the next SAPMA phase, replication and full roll-out is anticipated, resulting in the development of 8–10 schemes.

The pilot will REHABILITATE and EXPAND the ABC Irrigation Scheme. This is a 200 Ha smallholder irrigation scheme (open-canal type), which draws from the Zee River, a small perennial River. The Zee and the Ruvu, of which the Zee is a tributary, are important local sources of water for domestic and agricultural use.

Rehabilitation will include minimal re-leveling of the existing site and repair of a wing dam diversion structure, 300m primary canal, and necessary secondary canals and control gates.

The primary canal has sufficient capacity to support extension of the scheme on 50Ha of adjacent land, and the project will undertake undertake this expansion, which will include leveling, and construction of secondary canals and control gates.

The access road and the cooperative's processing capacity will be upgraded under existing SAPMA components.

Beneficiary farmers will be members of an existing cooperative, as well as 3 extended families currently occupying the expansion land informally. (The project will construct replacement housing for these families; the cooperative has already secured their agreement to be relocated to a nearby village.) SAPMA will train farmers in cultivation techniques, including use of agricultural inputs, and provide technical extension services such as soil tests. In return farmers will "tithe" 10% "of production from their assigned plot(s) to the cooperative. Agricultural inputs and tillage will be provided on credit by the cooperative.

The pilot will also serve as a mentored capacity-building opportunity for the provincial irrigation development department of the agricultural ministry, who will participate in scheme development. Similarly, SAPMA will fund a supervising engineer whose duties will include mentoring and training the local contractors in good-practice irrigation construction techniques. This is intended to put in place local capacity that will result in accelerated, good-practice development of irrigation schemes in the province.

SAPMA will operate the scheme for one year (two crop cycles are anticipated) then provide technical assistance to the cooperative and extension services to farmers for a second year.

IEE Conditions & field observations. Because irrigation development was not covered by the original SAPMA IEE, an IEE amendment was developed. This IEE Amendment imposes (among others) the conditions in the table below.

You undertake a visit to the ABC scheme and make a number of observations regarding how current conditions and practices compare to the IEE requirements. These are noted in the table below & documented in the photo tour.

IEE Condition	Field Visit Observation
1. Safe Pesticide Handling. Farmer training shall include safe pesticide handling practices as a mandatory component. During SAMPA's direct operation of the scheme, it shall assure that the PPE mandated by the USAID/XXX Agric Sector PERSUAP is available and that safe practices mandated by the PERSUAP are implemented. To promote safe practices following scheme hand-off, SAMPA shall work with the cooperative to build safe handling education into the process by which members gain access to cooperative-supplied agricultural inputs.	Numerous unsafe practices observed, such as barehands mixing and applicators without PPE (and in some cases without shirt or shoes.) (Note: the field visit occurred during SAMPA's direct operation of the irrigation scheme)
2. Water conservation. All primary and secondary canals shall be lined. A regular inspection maintenance plan shall be developed and implemented to identify and stop leaks. Intake shall be managed for as close to zero discharge as possible.	Some secondary canals have been put into service, apparently informally, prior to being lined. Significant system discharge was observed (intake gate was locked into position; manager with key was off-site during the site visit.)
3. Minimization of Ground and Surface Water Contamination Potential: *Farming operations must implement interventions, systems and practices that, to the full extent technically and economically practicable, minimize the potential for contamination of surface and ground water by agricultural practices and associated infrastructure.*	*Based on the field visit, what are your observations?*
4. Water quality monitoring. During the SAMPA direct operation and continuing technical assistance period, discharge and groundwater shall be monitored regularly for possible nutrient and pesticide contamination.	Water samples have not been taken from a consistent location or subjected to consistent analysis methods. There is no baseline data. If monitoring showed contamination, it is not a clear mechanism that would result in changes to operating practices.

(See next page for EMMP Template.)

EMMP Template: Smallholder Agricultural Productivity and Market Access Program

Activity/component: Smallholder Irrigation Schemes

Potential impacts (from IEE): Fertilizers and agricultural chemical use in smallholder irrigation schemes have the potential to create serious adverse impacts on local surface and groundwater quality; pesticides also present risks of significant adverse impacts on farm worker/applicator health, local community health (if domestic water sources are contaminated), and ecosystems. Poor Irrigation management and/or use of in inputs can lead to permanent degradation of soils. [etc.]

Note: Monitoring Log Section could be added at right of table—omitted for space reasons

IEE Condition	Specific Mitigation Measure/ Response	Responsible Party	Monitoring/Verification Method		Estimated Cost/ Budget notes
			Indicator/ How Verified	Data source; frequency	
1. Safe Pesticide Handling. Farmer training shall include safe pesticide handling practices as a mandatory component. During SAMPA's direct operation of the scheme, it shall assure that the PPE mandated by the USAID/XXX Agric Sector PERSUAP is available and that safe practices mandated by the PERSUAP are implemented. To promote safe practices following scheme hand-off, SAMPA shall work with the cooperative to build safe handling education into the process by which members gain access to cooperative-supplied agricultural inputs.	1A. Insert as many lines within as required to detail the mitigation measures undertaken in response to each condition.				
	1B.				
	1C.				
2. Water conservation. All primary and secondary canals shall be lined. A regular inspection maintenance plan shall be developed and implemented to identify and stop leaks. Intake shall be managed for as close to zero discharge as possible.					
3. Minimization of Ground and Surface					

IEE Condition	Specific Mitigation Measure/ Response	Responsible Party	Monitoring/Verification Method		Estimated Cost/ Budget notes
			Indicator/ How Verified	Data source; frequency	
Water Contamination Potential: Farming operations must implement interventions, systems and practices that, to the full extent technically and economically practicable, minimize the potential for contamination of surface and ground water by agricultural practices and associated infrastructure.					
4. Water quality monitoring. During the SAMPA direct operation and continuing technical assistance period, discharge and groundwater shall be monitored regularly for possible nutrient and pesticide contamination.					

Project Briefing 2: District Hospital Expansion and Rehabilitation

USAID/XXX's "Maternal, Child & Rural Health Support Program" (MCRH) is a 5-year, $50mn program intended to better monitor, diagnose and treat HIV/AIDS, TB, Cholera and other infectious "epidemic diseases." The program leverages the existing network of health posts and clinics which are supervised by and organized under the district hospitals. MCRH is 1 year into implementation.

(In XXX, district hospitals are key "anchors" of the public health system. In addition to providing treatment for more serious cases (and quarantine of potentially epidemic diseases), they serve as supervisory, data-collection, stocking and distribution centers for the clinics and health posts in their districts. District hospitals also provide prevention/education services via the out-district health posts under their direction.)

At the time that MCRH was designed, it was assumed that another donor would be supporting physical rehabilitation of the district hospitals in the MCRH target areas. In these areas, most district hospitals are 35-40 years old, and have undergone no significant expansion or rehabilitation since construction.

However, this expected complementary project did not materialize. Survey of existing facilities has determined that planned MCRH activities such as medical assistant training and equipment provision will fail to achieve the desired results unless hospital facilities themselves are significantly upgraded.

Therefore, a district hospital expansion/rehabilitation component is being added to MCRH. 5 District hospitals in MCRH target areas will be chosen according to criteria developed in consultation with the Ministry of Health.

At each hospital, new ward blocks will be constructed and existing blocks rehabilitated. The expected result is a 50% increase in bed capacity at beneficiary hospitals (usually ~ 60 beds), with significant improvements to lighting, ventilation and hygiene over existing conditions. This will be accompanied by rehabilitation and construction of new latrine blocks and drainage as well as perimeter fences and walls. No expansion of existing hospital grounds is anticipated. However, in some cases, adjacent settlement is informal and hospital fences/walls are non-existent or in poor repair. In these cases, dwellings have been erected inside hospital grounds.

New facilities/installations for management of sharps and other infectious medical waste will also be put in place. At all facilities surveyed, existing incinerators are poorly operated or in disrepair. New incinerators will be constructed/installed as necessary. On-site waste pits will be provided at all hospitals.

In consultation with each facility, management plans for infectious waste and facilities hygiene will be developed and associated training of staff carried out. This will include pest control plans and training, as insect and rodent infestations are a significant problem in all hospitals.

The pilot will also serve as a mentored capacity-building opportunity for the medical facilities department of the health ministry, who will participate in planning, contracting and oversight. This is intended to build governmental capacity for health facilities upgrades throughout the country.

XYZ District Hospital is one of several district hospitals receiving support under the District Hospital Expansion and Rehabilitation Component of the USAID/XXX "Maternal, Child & Rural Health Support Program" (MCRH).

Located ~2km from XYZ town center ~200m from the Zee river in a settled area, XYZ District Hospital is a 125-bed facility opened in 1972. Baseline population growth and the development of economic activities in XYZ have substantially increased the population the hospital serves, currently estimated at about 300,000 households. From its founding, the population it serves has increased nearly 10 times; however; the hospital facilities have not been expanded.

IEE Conditions and Field Observations.

Because the expansion/rehabilitation component was not covered by the original MCRH IEE, an IEE amendment was developed. This IEE Amendment imposes (among others) the conditions in the table below.

You undertake a visit to the XYZ Hospital and make a number of observations regarding how current conditions and practices compare to the IEE requirements. These are noted in the table below & documented in the photo tour. The conditions at this hospital are typical of District Hospitals in general.

IEE Condition	Field Visit Observation
Medical waste handling. By the conclusion of assistance under this MCRH component, supported District Hospitals must have adequate procedures and capacities in place to properly handle, label, treat, store, transport and dispose of blood, bio-hazards and other medical waste. Appropriate guidance is articulated in Part II, Chapter 9 of the USAID's *Environmental Guidelines for Small Scale Activities*, titled, 'Healthcare Waste: Generation, Handling, Treatment and Disposal. Particular reference is made to the section titled "Minimum elements of a complete waste management program" and the appropriate "Minimal Program Checklist and Action Plan" in Annex A.	Waste segregation in hospital appears consistent/adequate. A new incinerator has been installed, but appears to be operated infrequently. Infectious waste is stored in an open cage and in open pails and buckets around the incinerator area. Evidence of mice/rats. Incinerator residue and non-burnable medical waste is disposed on open ground.
Kitchen & Sanitary/Hygiene facilities. By the conclusion of assistance under this MCRH component, supported District Hospitals must have kitchen and sanitary/hygiene facilities (i.e. toilet/latrines & showers) & management protocols for these facilities sufficient to minimize the possibility of patient-to-patient & patient-to-staff transmission.	Kitchen is unscreened and within ~15m of incinerator and infectious waste storage area. Lacks hot-water for washing up and "clean storage" for serving ware and utensils. Several unscreened simple pit latrine blocks are in use and do not have hand-wash stations. They do not appear to be cleaned daily. (Flush toilets also in use, but not installed in all blocks.)
By the conclusion of assistance under this MCRH component, supported district hospitals must have **Brown and gray wastewater systems** must be sufficient to prevent contamination of surface or groundwater with infectious pathogens.	Brown and grey water is discharged via underground pipes to several pump-out in-ground tanks distributed across the hospital grounds. However, the hospital does not own a pump-out truck and is able to rent one only infrequently. Several tanks were over-full and septic liquid had pooled on the ground.

See next page for EMMP Template

EMMP Template: Maternal, Child & Rural Health Project (MCRH)

Activity/component: Hospital Rehabilitation and Expansion

Potential impacts (from IEE): Scaling-up of current hospital operations without improvements to waste management infrastructure and practices will result in continued and worsened pathogenic contamination of the local environment with consequent adverse effects on patient, staff and community health. Likewise, scaling up current operations without improvements to kitchen and sanitary/hygiene facilities and management practices will heighten already-high risks of patient-to-patient and patient-to-staff disease transmission.

Note: Monitoring Log Section could be added at right of table—omitted for space reasons

IEE Condition	Specific Mitigation Measure/ Response	Responsible Party	Monitoring/Verification Method		Estimated Cost/ Budget notes
			Indicator/ How Verified	Data source; frequency	
1. Medical waste handling. By the conclusion of assistance under this IDC/MCH component, supported hospitals must have adequate procedures and capacities in place to properly handle, label, treat, store, transport and dispose of blood, bio-hazards and other medical waste. Appropriate guidance is articulated in Part II, Chapter 9 of the USAID's *Environmental Guidelines for Small Scale Activities*, titled, 'Healthcare Waste: Generation, Handling, Treatment and Disposal. Particular reference is made to the section titled "Minimum elements of a complete waste management program" and the appropriate "Minimal Program Checklist and Action Plan" in Annex A.	1A. Insert as many lines within as required to detail the mitigation measures undertaken in response to each condition.				
	1B.				
	1C.				

IEE Condition	Specific Mitigation Measure/ Response	Responsible Party	Monitoring/Verification Method		Estimated Cost/ Budget notes
			Indicator/ How Verified	Data source; frequency	
2. Kitchen & Sanitary/Hygiene facilities. By the conclusion of assistance under this IDC/MCH component, supported hospitals must have kitchen and sanitary/hygiene facilities (i.e. toilet/latrines & showers) & management protocols for these facilities sufficient to minimize the possibility of patient-to-patient & patient-to-staff transmission.					
3. Wastewater systems. By the conclusion of assistance under this IDC/MCH component, supported hospitals must have brown and gray wastewater systems must be sufficient to prevent contamination of surface or groundwater with infectious pathogens.					

EMMP Development
Field Visit Photos

L-MEP Mainstreaming USAID Environmental Compliance Training Workshop
Monrovia, Liberia ▪ June 2011

XYZ District Hospital

Built 1972
125 beds.

Prior to MCRH interventions, no significant rehabilitation/ expansion.

(These blocs repainted for recent Ministerial visit; no interior work done.)

XYZ District Hospital
Latrines

IEE Condition:

"By the conclusion of assistance under this MCRH component, supported District Hospitals must have kitchen and sanitary/hygiene facilities (i.e. **toilet/latrines** & showers) & management protocols for these facilities sufficient to minimize the possibility of patient-to-patient & patient-to-staff transmission."

Observations:

Several unscreened simple pit blocks in use

Not clean at time of observation

No handwash stations

XYZ District Hospital
Kitchen

IEE Condition:

"By the conclusion of assistance under this MCRH component, supported District Hospitals must have **kitchen** and sanitary/hygiene facilities (i.e. toilet/latrines & showers) & management protocols for these facilities sufficient to minimize the possibility of patient-to-patient & patient-to-staff transmission."

Observations:

No clean storage.

Floors/walls not scrubbable

No hot water wash-up

Unscreened

<15m from incinerator & medical waste storage

View from kitchen window to open burn area and medwaste storage (under tree ~15m)

XYZ District Hospital

Medical waste management

IEE Condition:

"Medical waste handling. By the conclusion of assistance under this MCRH component, supported District Hospitals must have adequate procedures and capacities in place to properly handle, label, treat, store, transport and dispose of blood, bio-hazards and other medical waste. ."

Observations:

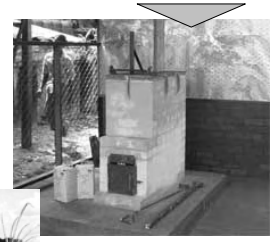
Segregation at source OK

New incinerator installed

However. . .

Waste segregation in rehabilitated block

New "De Montfort" incinerator



Old incinerator

XYZ District Hospital

Medical waste management

IEE Condition:

"Medical waste handling. By the conclusion of assistance under this MCRH component, supported District Hospitals must have adequate procedures and capacities in place to properly handle, label, treat, store, transport and dispose of blood, bio-hazards and other medical waste. ."

Observations:

Open storage of waste to be burned. Evidence of mice/rats.

Infrequent incinerator operation

Open disposal of incinerator residue & non-burnable waste

Outdoor open-cage and open-pail storage of infectious waste

XYZ District Hospital

Brown and Grey Water

IEE Condition:

"By the conclusion of assistance under this MCRH component, supported district hospitals must have **Brown and gray wastewater systems** must be sufficient to prevent contamination of surface or groundwater with infectious pathogens."

Observations:

Blocked gray-water sumps

Open discharge from bathing stalls

Blocked gray-water sump

XYZ District Hospital

Brown and Grey Water

IEE Condition:

"By the conclusion of assistance under this MCRH component, supported district hospitals must have **Brown and gray wastewater systems** must be sufficient to prevent contamination of surface or groundwater with infectious pathogens."

Observations:

Overfull central wastewater tanks (overdue for pumpout). Septic liquid pooling on ground

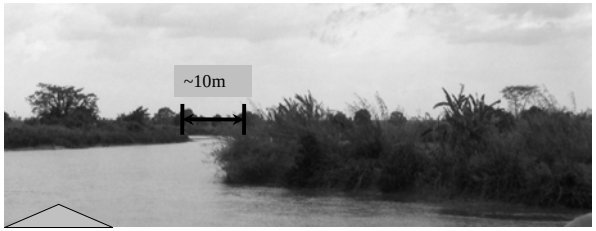
Open and missing tank covers

ABC Smallholder Irrigation Scheme

200 Ha, potential to expand by 50Ha

Wing diversion dam/open-canal type

Multiple crops: rice, vegetables



The Zee river at intake point; upstream view; high-flow season.

View of scheme from primary canal

ABC Smallholder Irrigation Scheme

Pesticide Handling

IEE Condition:

"Farmer training shall include safe pesticide handling practices as a mandatory component. During SAMPA's direct operation of the scheme, it shall assure that appropriate PPE is available and that the PERSUAP-specified practices are implemented. ."

Observations:

Hand mixing common

No evidence of PPE in use

ABC Smallholder Irrigation Scheme

Water Conservation

IEE Condition:

All primary and secondary canals shall be lined. A regular inspection maintenance plan shall be developed and implemented to identify and stop leaks. Intake shall be managed for as close to zero discharge as possible.

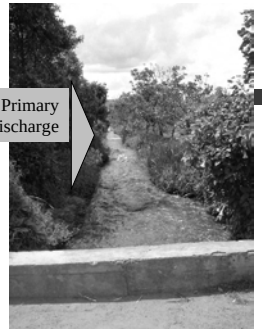
Observations:

Breeches in canal

Some unlined canals in use

High volumes of discharge

Unlined secondary canal.



Heavy growth on bank shows location of secondary canal breech.

ABC Smallholder Irrigation Scheme

Water Quality Monitoring

IEE Condition:

During the SAMPA direct operation and continuing technical assistance period, groundwater and discharge shall be monitored regularly for possible nutrient and pesticide contamination..

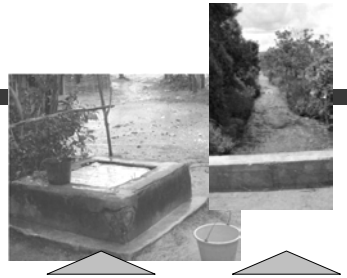
Observations:

Inconsistent sampling locations and analyses

No baseline

No mechanism for responding to contamination

Town water extraction point is just downstream of irrigation scheme



inconsistent sampling locations.

Intake water not monitored

Workshop Evaluation

Format

Fill in workshop evaluation forms.

Summary

This is the third EMMP-focused environmental compliance workshop delivered in Africa for USAID staff and implementing partners, and the first in a shorter two-day format. Your feedback is essential to strengthen materials and agenda—and to draw attention to Partner and Project TA and support needs for ESDM and environmental compliance.

Key Resource

Evaluation form (following pages)

Workshop evaluation

L-MEP Mainstreaming USAID Environmental Compliance Training Workshop
for USAID/Liberia Staff & Implementing Partners
Monrovia, Liberia ▪ June 2011

Your frank and honest feedback will help strengthen future trainings and help identify needs for additional environmental compliance capacity building for USAID/Liberia Programs. Thank-you for your time!

Learning approach

For each issue, please check the assessment you most agree with

Issue	Assessment					Comments
The balance of presentations to small group work & discussions	Much more emphasis on presentations needed	A bit more emphasis on presentations needed	About right	A bit more emphasis on group work/ discussions needed	Much more emphasis on group work/ discussions needed	
Technical level & pace	Much too heavy	A little too heavy	About right	A bit too light	Much too light	
Opportunities for peer exchange & learning	Needed to hear and learn much more directly from facilitators	Needed to hear and learn more directly from facilitators	About right	Some more opportunities for peer learning/ exchange are needed	Many more opportunities for peer learning/exchange are needed	

Highest/Lowest-rated sessions

Please identify the 1 or 2 sessions that you rate most highly (for content, usefulness, approach or for other reasons). Please also identify the 1 or 2 sessions that you found least engaging/useful/relevant. Please briefly indicate the reasons for your choice. (You may wish to refer to the agenda to refresh your memory.)

	Session	Comment (Please explain why you made this choice.)
HIGH-RATED		
HIGH-RATED		
LOW-RATED		
LOW-RATED		

Overall evaluations

Please check the assessment you most agree with.

Issue	Assessment					Comments
	Very poor	Poor	Acceptable	Good	Excellent	
Technical quality (Program & Content)						
Facilitation						
Logistics						
Venue						

Impact

Please circle the characterization you most agree with.

Question	Characterization			Comments
Baseline Knowledge In light of what you have learned in this workshop, how would you rate your understanding of USAID environmental compliance requirements and project mitigation and monitoring BEFORE this workshop?	Had poor or limited understanding	Understood the basics, lacked some details	Had a strong and detailed understanding	
Empowerment To what extent has this workshop increased your knowledge and capabilities to address environmental compliance requirements?	Not at all	Moderately	Strongly	
Motivation To what extent has this workshop increased your motivation to *proactively* address issues related to environmental compliance?	Not at all	Moderately	Strongly	

Key topics not covered

Were there any topics of key importance to you that were not covered or were given very limited attention?	

Support needs

Are there particular environmental compliance and/or EMMP support needs or resources that you require?	

***Additional comments welcome on any topic*.**

Appendices

- **Environmental Review Form for Subprojects**
- **Environmental Compliance Language Fact Sheet**
- **Environmental Compliance Language for Solicitations and Awards**
- **USAID Environmental Procedures Briefing**

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Instructions for environmental review of XXX Program Subprojects/Sub-grants

Note: *These instructions accompany the attached "Environmental Review Form for USAID/XXX Program/Project Activities" (ERF).* ***Follow, but DO NOT SUBMIT, these instructions.***

Who must submit the Environmental Review Form (ERF)?

ALL Implementing Partners seeking to implement [describe qualifying activities] under the XXX Program/Project must complete, sign and submit the ERF to [insert name & email of C/AOTR].

Authority: Use of the ERF for these activities is mandated by the governing Initial Environmental Examination (IEE) for the XXX Project/Program. The IEE can be downloaded at: *[insert URL]*.

No implementation without an approved ERF

The proposed activities cannot be implemented and no "irreversible commitment of resources" for these activities can be made until the ERF (including Environmental Review Report, if required, see Step 4, below) is cleared by the C/AOTR, the Mission Environmental Officer (MEO) and the Regional Environmental Advisor (REA).

NOTE: USAID may deny clearance to the ERF, or may require modification and re-submission for clearance.

Environmental management requirements resulting from the ERF

If the ERF requires preparation of an Environmental Review Report (see Step 4, below), any environmental management measures specified in the approved Environmental Review Report MUST be implemented.

Situations in which additional environmental review is required.

If the ERF finds that one of more of the proposed activities has the potential to cause significant adverse environmental impacts, the activities must be redesigned or an IEE or full Environmental Assessment must be conducted and approved prior to implementation.

If USAID determines that the proposed activities are outside the scope of activities for which use of this form is authorized, the activities must be redesigned or an IEE or IEE Amendment will be required.

In either situation, USAID will confer with the partner to determine next steps. Note: If an IEE or EA is required, all environmental management measures specified in the IEE or EA must then be implemented.

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.

Activities are a desired accomplishment or output: e.g. seedling production, road rehabilitation, school construction. Each activities has entailed *actions*—for example, road rehabilitation includes survey, grading, culvert construction, compaction, etc. *Be aware of these entailed actions, but do NOT list them.*

List activities DESCRIPTIVELY. For example, "training" is not a sufficient activity listing. The listing must specify WHO is being trained, and in WHAT.

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))	**High-risk activities** (Activities with high potential for adverse biophysical or health impacts; including §216.2(d)(1))
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."	**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 restricted use 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

CAUTION:
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. (You may wish to define what "small scale" means for each activity)

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. 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

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.

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

Examine the "screening results" as you have entered them in Table 1 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. Activity re-design is often indicated.

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 4–5 page document. The Report will typically be longer for (1) multiple activities; (2) activities of high or unknown risk; and/or (3) when a number of impacts and mitigation measures are being identified and discussed.

The Environmental Review Report follows the outline below. Alternate outlines are acceptable, so long as all required information is covered.

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. **Site-specific 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?

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

NOTE: provide site-specific information in this section, NOT country-level information. General information about country level conditions should already be contained in the IEE governing the XXX project/program.

D. Environmental Issues, Mitigation Actions, and Findings. For ALL proposed activities

i. Briefly note the potential environmental impacts or concerns presented by the proposed activities (if any). *For guidance, refer to Africa Bureau's Environmental Guidelines for Small-Scale Activities; available at www.encapafrica.org/egssaa.htm.*

As per the *Small-Scale Guidelines*, consider direct, indirect and cumulative impacts across the activity lifecycle (i.e. impacts of site selection, construction, and 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). Note that "environment" includes 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.)

ii. Assess the extent to which these *potential* impacts and concerns are significant in the context of the specific activity design and site.

iii. Set out the mitigation actions to be employed to address these issues.

Mitigation actions are means taken to avoid, reduce or compensate for impacts. Mitigation measures must be reasonable and implementable by field staff. They should be consistent with the good practice guidance provided in Africa Bureau's Environmental Guidelines for Small-Scale Activities; (www.encapafrica.org/egssaa.htm.) Cite this or other guidance used for mitigation design.

iv. Reach one of three findings regarding the potential impacts:

a. Significant adverse impacts are very unlikely. Of its nature, the activity in question is very unlikely to result in significant, adverse environmental impacts. Special mitigation or monitoring is not required.
Note: this conclusion is rarely appropriate for high-risk activities.

b. With implementation of the specified mitigation and monitoring, significant adverse impacts are very unlikely.

c. Significant adverse impacts are possible. That is, it is not possible to rule out significant adverse environmental impacts even given reasonable, attainable mitigation and monitoring.

In this case, USAID and the partner will consult regarding next steps. If the activity is to go forward in its current form, additional analysis in the form of an IEE or EA will be required.

Format and structure of this section. Choose a format and structure that presents the necessary information clearly and succinctly.

Table formats can be used. In the example below, the proposed activity was construction of an institutional facility on a 7500m3 plot bisected by a seasonal stream providing drainage to the local area. One potential impact of the activity was reduction of or alteration to the drainage eco-service provided by the seasonal stream.

Issue or cause for concern	Analysis	Finding and conditions/mitigation actions
The seasonal stream running through the plot drains an area of at least 2 km^2 to the WNW. Diminution or alteration to this drainage "service" could result in increased upstream pooling & flooding during the rainy season, with associated property damage and increased breeding habitat for disease vectors.	As indicated at left, this impact only arises if the drainage "service " provided by the seasonal stream is diminished or altered in some adverse manner. So long as compound design maintains the existing service level and construction is managed without disruption to stream flow, actual adverse impact will be negligible or zero.	Per analysis at left, this potential impact is not significant, so long as the following mitigations are implemented: 1. Total stream capacity cannot be diminished by the development of the compound. (Stream channel on average is 3m x 1m.) 2. The stream must remain substantially in the same channel and cannot, e.g., be re-routed around the property. 3. If construction will result in an interruption to stream flow, provision must be made to provide a temporary bypass. Temporary damming of stream flow is not permissible. 4. Post-construction, the stream bed within the property, including point-of-entry (e.g. via culvert under perimeter wall) must be maintained free of obstructions to flow.

E. Environmental Mitigation and Monitoring Plan (EMMP). Set out how compliance with mitigation actions will be monitored/verified. This includes specifying WHO will be responsible for the various mitigation actions, and HOW implementation of the mitigation actions will be tracked/verified.

Also specify how you will report to USAID on the implementation of mitigation actions. (You are REQUIRED to provide your C/AOTR with sufficient information on the status of mitigation implementation for USAID to effectively fulfill its oversight and performance monitoring role.)

Again, choose a format and structure that presents the necessary information clearly and succinctly. EMMPs are typically in table format, and often include a compliance log or "monitoring record" section that records implementation status of the various mitigation actions. The EMMP with current monitoring log can then simply be submitted to the C/AOTR with the quarterly or 6-month project report, satisfying the environmental compliance reporting requirement. .

The most basic EMMP format is

Mitigation action	Responsible Party	Monitoring/Verification Method	Monitoring Record (date, result, corrective actions taken, if any)

For additional EMMP formats and examples, see the ENCAP EMMP factsheet, available via www.encapafrica.org/meoEntry.htm

F. **Other Information**. Where possible and as appropriate, include photos of the site and surroundings; maps; and list the names of any reference materials or individuals consulted.

(Pictures and maps of the site can substantially reduce the written description required in parts B & C)

Step 6. Transcribe findings from the Environmental Review Report to the ERF

For each high-risk or unknown/moderate-risk activity, transcribe your finding from the environmental review report to the last column of Section B of the ERF.

Step 7. Sign certifications (Section C of former.)

Step 8. Submit form to USAID C/AOTR. Be sure to attach the Environmental Review Report, if any.

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Environmental Review Form for XXX Program subprojects/subgrants

Follow, but do not submit, the attached instructions.

A. Applicant information

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

B. Activities, screening results, and findings

Proposed activities (Provide DESCRIPTIVE listing. Continue on additional page if necessary)	**Screening result** (Step 3 of instructions)			**Findings** (Step 6 of instructions. Complete for all moderate/unknown and high-risk activities ONLY)		
	Very Low Risk	High-Risk*	Moderate or unknown risk*	significant adverse impacts are very unlikely	With specified mitigation, significant adverse impacts are very ulikely	Significant Adverse impacts are possible
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						

*These screening results require completion of an Environmental Review Report

C. Certification:

I, the undersigned, certify that:

1. The information on this form and accompanying environmental review report (if any) is correct and complete.
2. Implementation of these activities will not go forward until specific approval is received from the C/AOTR.
3. All mitigation and monitoring measures specified in the Environmental Review Report will be implemented in their entirety, and that staff charged with this implementation will have the authority, capacity and knowledge for successful implementation.

(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

Notes:

1. For clearance to be granted, the activity MUST be within the scope of the activities for which use of the ERF is authorized in the governing IEE. **Review IEE before signature.** If activities are outside this scope, deny clearance and provide explanation in comments section. The Partner, C/AOTR, MEO and REA must then confer regarding next steps: activity re-design, an IEE or EA.

2. Clearing an ERF containing one or more findings that **significant adverse impacts are possible** indicates agreement with the analysis and findings. It does NOT authorize activities for which "significant adverse impacts are possible" to go forward. It DOES authorize other activities to go forward. The Partner, C/AOTR, MEO and REA must then confer regarding next steps: activity re-design, an IEE or EA.

Clearance record

C/AOTR ☐ Clearance given ☐ Clearance denied	(print name)	(signature)	(date)
USAID/XXXX 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)

C/AOTR, MEO and REA clearance is required. BEO clearance is required for all "high risk" screening results and for findings of "significant adverse impacts possible. The BEO may review "

Note: if clearance is denied, comments must be provided to applicant
(use space below & attach sheets if necessary)

Version: 14 November 2008

Download the ECL at:
www.usaid.gov/policy/ads/200/204sac.pdf

Download this factsheet at:
www.encapafrica.org/meoEntry.htm

For more information,
email the ENCAP core team at:
encapinfo@cadmusgroup.com

ENCAP FACTSHEET

ENVIRONMENTAL COMPLIANCE: LANGUAGE FOR USE IN SOLICITATIONS AND AWARDS (ECL)

ABOUT THE ECL AND THIS FACTSHEET

The ADS Help Document, "Environmental Compliance: Language for Use in Solicitations and Awards" is a combination of step-by-step guidance and boilerplate text to assemble appropriate, ADS-mandated environmental compliance language for all solicitations and awards. This factsheet is an orientation to the ECL, and particularly targets COs, CTOs, and Activity Managers. It is intended both as a training aid and as a succinct stand-alone reference.

BACKGROUND: USAID'S MANDATORY ENVIRONMENTAL PROCEDURES

Section 117 of the Foreign Assistance Act of 1961, as amended, requires that USAID use an Environmental Impact Assessment (EIA) process to evaluate the potential impact of the Agency's activities on the environment **prior** to implementation, and that USAID "fully take into account" environmental sustainability in designing and carrying out its development programs. This mandate is codified in Federal Regulations (22 CFR 216 or "Reg. 216") and in USAID's Automated Directives System (ADS), particularly Parts 201.3.12.2.b and 204.

Compliance with the procedures is mandatory. With limited exceptions for international disaster assistance, they apply to every program, project, activity, and amendment supported with USAID funds or managed by USAID.

In general, the procedures specify an EIA process must be applied to all activities before implementation—including new activities introduced into an existing program or substantive changes to existing activities. The only exceptions are international disaster assistance activities verified as EXEMPT from the procedures.

Why the environmental procedures?

The procedures are USAID's principal mechanism to ensure environmentally sound design and management (ESDM) of development activities—and thus to prevent significant adverse impacts on critical environmental resources and ecosystems and on the health and livelihoods of beneficiaries or other groups resulting from inadequate attention to environmental issues in design and operation.

In short, the procedures strengthen development outcomes and help safeguard the good name and reputation of the Agency.

To learn more about ESDM, view the presentation *Environment, Development and Environmentally Sound Design and Management* at www.encapafrica.org/tzWorkshop.htm.

The output of this EIA process is "Reg. 216 Environmental Documentation," which takes one of three forms: a Request for Categorical Exclusion, an Initial Environmental Examination (IEE) or an Environmental Assessment (EA).

This documentation must be cleared by the Mission Environmental Officer (MEO) and the Mission Director AND approved by the Bureau Environmental Officer (BEO) PRIOR to any "irreversible commitment" of resources. Most IEEs and all EAs specify environmental mitigation and monitoring measures (IEE and EA "conditions") that must be implemented and verified over life-of-project (LOP).[1]

PROCUREMENT LANGUAGE AND ENVIRONMENTAL COMPLIANCE

USAID oversees and monitors project/activity environmental compliance. Actual implementation of IEE and EA conditions, however, is the responsibility of the prime contractor/grantee ("partner") responsible for project/activity implementation. *The ADS therefore requires that all IEE and EA conditions (or a*

[1] For a more detailed discussion of USAID's Environmental Procedures, see the "USAID Environmental Procedures Briefing for Mission Staff," available at www.encapafrica.org/meoEntry.htm.

The factsheet was prepared by The Cadmus Group, Inc. for International Resources Group, Ltd. (IRG) under USAID Africa Bureau's Environmental Compliance and Management Support (ENCAP) Program, Contract Number EPP-I-00-03-00013-00, Task Order No. 11. Its contents are the sole responsibility of the authors and do not necessarily reflect the views of USAID or the United States Government.

statement that requires compliance with them) are incorporated into procurement instruments (ADS 204.3.4.a.6; 303.3.6.3e).

Beyond this, however, LOP environmental compliance is best assured when solicitation and award instruments also incorporate the elements set out and justified in the table below:

Environmental compliance elements in solicitation/award instrument	Reason
No activity is implemented unless covered by approved Reg. 216 environmental documentation.	Establishes the importance of maintaining full environmental documentation coverage.
The partner must verify current and planned activities annually against the scope of the approved Reg. 216 environmental documentation.	Guards against a project "creeping" out of compliance due to the addition or modification of activities outside the scope of the approved Reg. 216 environmental documentation. This usually takes place during the annual work planning process.
Where activities demand environmental management expertise, appropriate qualifications and proposed approaches to compliance must be addressed in technical and cost proposals.	Helps ensure that the partner/team selected for the work is capable of implementing the required environmental management activities. Also sends a clear message that environmental management is not an afterthought, but an integral part of the project, and a core qualification.
The partner must develop an Environmental Mitigation and Monitoring Plan (EMMP) fully responsive to all IEE/EA conditions, unless (1) the EMMP already exists in the approved Reg. 216 documentation, or (2) will be developed by USAID.	The EMMP translates the general mitigation directives in the IEE or EA into more specific measures, assigns responsibilities for their implementation, and sets out monitoring/reporting measures to verify their implementation and effectiveness. Without an EMMP, systematic & verifiable implementation of IEE/EA conditions is almost impossible.
Budgets and work plans integrate the EMMP.	Unless the EMMP is integrated in the budget and work plan, it will not be implemented.
PMPs measure EMMP implementation.	As the EMMP is an integral part of project implementation, it should be treated this way in project evaluation and reporting.

Collectively, incorporating these compliance elements in the solicitation and award (1) ensures that necessary compliance mechanisms are in place, (2) integrates monitoring and reporting on environmental compliance into routine project/activity monitoring and reporting, and (3) clearly communicates and establishes partner responsibility for LOP compliance. The result is *improved compliance, improved project outcomes, and reduced demands on mission staff*—particularly on activity managers and CTOs, who are required to actively manage and monitor compliance with any IEE/EA conditions per ADS 202.3.6 and 303.2.f.

WHY USE THE ECL?

The ECL is a non-mandatory help document. However, its use:

- Results in environmental compliance language that conforms to ADS requirements and best practice, as described in the table above, therefore realizing the compliance, outcomes, and manager workload benefits also noted above.
- Substantially reduces the time required to develop environmental compliance language.
- Improves consistency across the Agency in addressing environmental compliance.

HOW TO USE THE ECL AND WHAT YOU NEED IN HAND

Use of the ECL is self-explanatory:

1. Follow the instructions on page 3 of the document to assemble the compliance language, then
2. Finalize the [text in brackets and blue highlight].

However, both steps require familiarity with the Reg. 216 documentation covering the activities involved in the solicitation/procurement. In some cases, an IEE specific to the procurement is prepared (in which case the compliance language should be assembled at the same time). In other cases, the solicitation/procurement is covered by a strategic- or program-level IEE of broader scope. In this case, the CTO and MEO should identify the IEE determinations and conditions that apply to the procurement. Once this is done, use of the ECL is straightforward.

Regardless, it is the responsibility of the CTO and Activity Manager, working with the CO, to assure that appropriate environmental compliance language is incorporated in solicitation and procurement instruments.

Environmental Compliance: Language for Use in Solicitations and Awards

An Additional Help for ADS Chapter 204

Revision Date: 05/19/2008
Responsible Office: EGAT
File Name: 204sac_051908

HOW TO ASSEMBLE COMPLIANCE LANGUAGE

To assemble the compliance language for a particular solicitation or award, the following table should be used as guidance. Multiple situations can apply to a single procurement; if this is the case, use all indicated language. You may need to revise and/or renumber the language depending on which elements you select and where you place them in the award or solicitation. [*Bracketed text*] in the model language indicates that you must select the appropriate option or provide other input.

When the situation is that. . .	**Use these environmental compliance language paragraphs from the Model Language. . .**
Approved Regulation 216 documentation[2] exists and it contains. . .	
Categorical Exclusions and Negative Determinations only	1a through 1c 4a through 4c
at least one **Negative Determination with conditions**	1a through 1c 2 4a through 4c 5a through 5d 8a through 8d (optional: to be used when project will involve environmental compliance expertise; collaborate with MEO, or BEO for projects originating out of AID/W, for guidance, as needed)
at least one **Positive Determination**	1a through 1c 3 4a through 4c 5a through 5d 8a through 8d
The contractor/recipient will be required to prepare Regulation 216 documentation (an EA or IEE)	1a through 1c 4a through 4c 5a through 5d 6a through 6c 8a through 8d 2 If there is also an existing IEE that contains a Negative Determination with conditions 3 If there is also an existing IEE that contains a Positive Determination

[2] Note: "Approved Regulation 216 documentation" refers to a Request for Categorical Exclusion (RCE), Initial Environmental Examination (IEE), or Environmental Assessment (EA) duly signed by the Bureau Environmental Officer (BEO).

The project includes a sub-grant fund	To any of the above language/situations that apply, add: 7a and 7b 8a through 8d (Paragraphs 7 and 8 are optional, based on the nature of the grant fund and potential environmental impacts; coordinate with MEO or BEO for projects originating out of AID/W for guidance, as needed)

MODEL LANGUAGE

1. Insert paragraphs 1a, 1b, and 1c in all solicitations and resulting awards:

- In RFAs, insert in the Program Description or in the RFA's instructions regarding Technical Application Format
- In RFPs, insert in the appropriate section, often the "Special Contract Requirements"

1a) The Foreign Assistance Act of 1961, as amended, Section 117 requires that the impact of USAID's activities on the environment be considered and that USAID include environmental sustainability as a central consideration in designing and carrying out its development programs. This mandate is codified in Federal Regulations (22 CFR 216) and in USAID's Automated Directives System (ADS) Parts 201.5.10g and 204 (*http://www.usaid.gov/policy/ADS/200/*), which, in part, require that the potential environmental impacts of USAID-financed activities are identified prior to a final decision to proceed and that appropriate environmental safeguards are adopted for all activities. [*Offeror/respondent/contractor/recipient*] environmental compliance obligations under these regulations and procedures are specified in the following paragraphs of this [*RFP/RFA/contract/grant/cooperative agreement]*.

1b) In addition, the contractor/recipient must comply with host country environmental regulations unless otherwise directed in writing by USAID . In case of conflict between host country and USAID regulations, the latter shall govern .

1c) No activity funded under this [*contract/grant/CA*] will be implemented unless an environmental threshold determination, as defined by 22 CFR 216, has been reached for that activity, as documented in a Request for Categorical Exclusion (RCE), Initial Environmental Examination (IEE), or Environmental Assessment (EA) duly signed by the Bureau Environmental Officer (BEO). (Hereinafter, such documents are described as "approved Regulation 216 environmental documentation.")

2. If the approved Regulation 216 documentation includes any Negative Determinations with conditions, insert 2.

This language stipulates that the activity(ies) must be implemented in compliance with the conditions specified in the Negative Determination.

2) An Initial Environmental Examination (IEE) [*(insert IEE # and download reference here, if available)*] has been approved for [*the Program(s)/Project*] funding this [*RFA/RFP/contract/grant/cooperative agreement (CA)*]. The IEE covers activities expected to be implemented under this [*contract/grant/CA*]. USAID has determined that a **Negative Determination with conditions** applies to one or more of the proposed activities. This indicates that if these activities are implemented subject to the specified conditions, they are expected to have no significant adverse effect on the environment. The [*offeror/applicant/contractor/recipient*] shall be responsible for implementing all IEE conditions pertaining to activities to be funded under this [*solicitation/award*].

3. If the approved Regulation 216 documentation includes a Positive Determination, insert 3.

This language specifies that an approved Environmental Assessment (EA) must exist prior to implementation of the activity(ies), and that the activity(ies) must be implemented in compliance with the conditions in the approved EA.

> 3) An Initial Environmental Examination (IEE) has been approved for the [*Program or project funding*] this [*RFA/RFP/contract/agreement*] and for activities to be undertaken herein [*(insert IEE # and download reference here, if available)*]. The IEE contains a **Positive Determination** for the following proposed activities: [*(specify)*]. This indicates that these activities have the potential for significant adverse effects on the environment. Accordingly, the [*contractor/recipient*] is required to [*comply with the terms of*/prepare and submit***] an Environmental Assessment (EA) addressing the environmental concerns raised by these activities. No activity identified under this Positive Determination can proceed until Scoping as described in §216.3(a)(4) and an EA as described in §216.6 are completed and approved by USAID (Note that the completed Scoping Statement is normally submitted by the MEO to the BEO when the project originates in a Mission. The Statement may be circulated outside the Agency by the BEO with a request for written comments within 30 days and approved by the BEO subsequently. Approval of the Scoping Statement must be provided by the BEO before the EA can be initiated.)

[*]If an EA already exists, and the contractor/recipient will not be required to prepare the EA, but will be required to comply with the terms of an existing EA.

[**]If contractor/recipient must prepare and submit an EA, also insert 6a through 6c.

Note: If the contractor is to prepare an EA, then this should be specified in the RFP/RFA instructions. The final negotiation of the EA will be incorporated into the award. Paragraphs 8a through d will always apply when the approved environmental documentation includes a Positive Determination, whether the contractor/recipient is preparing the EA or simply required to comply with an existing EA.

4. Insert for all solicitations and awards

The language requires that the contractor/recipient must ensure all activities, over the life of the project, are included in the approved Regulation 216 documentation.

> 4a) As part of its initial Work Plan, and all Annual Work Plans thereafter, the [*contractor/recipient*], in collaboration with the USAID Cognizant Technical Officer and Mission Environmental Officer or Bureau Environmental Officer, as appropriate, shall review all ongoing and planned activities under this [*contract/grant/CA*] to determine if they are within the scope of the approved Regulation 216 environmental documentation.
>
> 4b) If the [*contractor/recipient*] plans any new activities outside the scope of the approved Regulation 216 environmental documentation, it shall prepare an amendment to the documentation for USAID review and approval. No such new activities shall be undertaken prior to receiving written USAID approval of environmental documentation amendments.
>
> 4c) Any ongoing activities found to be outside the scope of the approved Regulation 216 environmental documentation shall be halted until an amendment to the documentation is submitted and written approval is received from USAID.

5. If the approved Regulation 216 documentation contains one or more Negative Determinations with conditions and/or an EA, insert 5a through 5d. (These paragraphs should also always be used when the contractor/recipient is writing an IEE or EA.)

The language requires the contactor/recipient to integrate mitigation measures and monitoring into project work plans.

5 When the approved Regulation 216 documentation is (1) an IEE that contains one or more Negative Determinations with conditions and/or (2) an EA, the [*contractor/recipient*] shall:

5a) Unless the approved Regulation 216 documentation contains a complete environmental mitigation and monitoring plan (EMMP) or a project mitigation and monitoring (M&M) plan, the [*contractor/recipient*] shall prepare an EMMP or M&M Plan describing how the [*contractor/recipient*] will, in specific terms, implement all IEE and/or EA conditions that apply to proposed project activities within the scope of the award. The EMMP or M&M Plan shall include monitoring the implementation of the conditions and their effectiveness.

5b) Integrate a completed EMMP or M&M Plan into the initial work plan.

5c) Integrate an EMMP or M&M Plan into subsequent Annual Work Plans, making any necessary adjustments to activity implementation in order to minimize adverse impacts to the environment.

6. For solicitations, if the Proposal Instructions specifies that the [*contractor/recipient*] will be required to prepare Regulation 216 documentation (IEE or EA) for some or all activities, insert 6a through 6c.

6a) Cost and technical proposals must reflect IEE or EA preparation costs and approaches.

6b) [*Contractor/recipient*] will be expected to comply with all conditions specified in the approved IEE and/or EA.

6c) If an IEE, as developed by the [*contractor/recipient*] and approved by USAID, includes a Positive Determination for one or more activities, the contractor/recipient will be required to develop and submit an EA addressing these activities.

Note: In this case, always insert paragraphs 8a through 8d, as well.

7. For solicitations and awards when sub-grants are contemplated, and the IEE gives a Negative Determination with conditions that specifies use of a screening tool for sub-grants, insert 7a and 7b.

7a) A provision for sub-grants is included under this award; therefore, the [*contractor/recipient*] will be required to use an Environmental Review Form (ERF) or Environmental Review (ER) checklist using impact assessment tools to screen grant proposals to ensure the funded proposals will result in no adverse environmental impact, to develop mitigation measures, as necessary, and to specify monitoring and reporting. Use of the ERF or ER checklist is called for when the nature of the grant proposals to be funded is not well enough known to make an informed decision about their potential environmental impacts, yet due to the type and extent of activities to be funded, any adverse impacts are expected to be easily mitigated. Implementation of sub-grant activities cannot go forward until the ERF or ER checklist is completed and approved by USAID. [*Contractor/Recipient*] is responsible for ensuring that mitigation measures specified by the ERF or ER checklist process are implemented.

7b)	The [*contractor/recipient*] will be responsible for periodic reporting to the USAID Cognizant Technical Officer, as specified in the Schedule/Program Description of this solicitation/award.

8. For solicitations ONLY: Insert 8a through 8d when:

- **the approved Regulation 216 documentation is a Positive Determination or an EA; or**
- **when the contractor/recipient will be expected to prepare Regulation 216 documentation; or**
- **when there is a sub-grant fund that requires use of an Environmental Review Form or Environmental Review checklist; and/or**
- **when there is a Negative Determination with conditions that will require environmental compliance expertise to prepare and/or implement an EMMP or M&M Plan, as determined in collaboration with the MEO or BEO for projects originating out of AID/W.**

8a)	USAID anticipates that environmental compliance and achieving optimal development outcomes for the proposed activities will require environmental management expertise. Respondents to the [*RFA/RFP*] should therefore include as part of their [*application/proposal*] their approach to achieving **environmental compliance and management,** to include:
8b)	The respondent's approach to developing and implementing an [*IEE or EA or environmental review process for a grant fund and/or an EMMP or M&M Plan*].
8c)	The respondent's approach to providing necessary environmental management expertise, including examples of past experience of environmental management of similar activities.
8d)	The respondent's illustrative budget for implementing the environmental compliance activities. For the purposes of this solicitation, [*offerors/applicants*] should reflect illustrative costs for environmental compliance implementation and monitoring in their cost proposal.

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USAID Environmental Procedures Briefing for USAID/XXX Staff

Contents

Acronyms

ADS	Automated Directives System
BEO	Bureau Environmental Officer
CFR	Code of (US) Federal Regulations
CTO	Cognizant Technical Officer
EA	Environmental Assessment
ECL	Environmental Compliance Language for Use in Solicitations and Awards (ADS 204 help document)
EIA	Environmental Impact Assessment
EMMP	Environmental Mitigation & Monitoring Plan
ESDM	Environmentally Sound Design and Management
IEE	Initial Environmental Examination
LOP	Life-of-Project
MEO	Mission Environmental Officer
PMP	Performance Monitoring Plan
REA	Regional Environmental Advisor
Reg. 216	22 CFR 216

About this *Briefing*

All USAID Missions and operating units are required to fully implement and comply with USAID's mandatory environmental procedures. This briefing is intended to support short mission staff trainings in these procedures and to serve as a succinct post-training reference. Towards these ends, it:

- ✓ summarizes the environmental procedures in plain language, and
- ✓ sets out the roles and responsibilities of organizational units and functions in the Mission in achieving and assuring compliance.

This briefing is closely based on and fully compatible with the new model *Environmental Compliance Mission Order* adopted by Africa Bureau. The plain-language summary in this *Briefing* does not supercede the statutory, regulatory and ADS language that governs and constitutes these procedures. This language may be accessed via http://www.encapafrica.org/meoEntry.htm or provide internal server filelink.

Legal Authority for and Purpose of USAID's Environmental Procedures

Section 117 of the Foreign Assistance Act of 1961, as amended, **requires** that USAID use an Environmental Impact Assessment (EIA) process to evaluate the potential impact of the Agency's activities on the environment **prior** to implementation, and that USAID "fully take into account" environmental sustainability in designing and carrying out its development programs. This mandate is codified in Federal Regulations (22 CFR 216 or "Reg. 216") and in USAID's Automated Directives System (ADS), particularly Parts 201.3.12.2.b and 204.

These procedures are USAID's principal mechanism to ensure environmentally sound design and management (ESDM) of development activities. Put another way, they are USAID's principal mechanism to prevent USAID-funded activities from having significant, unforeseen, avoidable or mitigable adverse impacts on critical environmental resources, ecosystems, and the health and livelihoods of beneficiaries or other groups. They strengthen development outcomes and help safeguard the good name and reputation of the Agency.

Compliance with these procedures is mandatory. With limited exceptions for international disaster assistance, they apply to every program, project, activity, and amendment supported with USAID funds or managed by USAID. USAID/XXX is fully committed to their systematic and complete implementation.

Environmental Compliance Requirements over Life of Project

In general, the procedures specify an EIA process that must be applied to all activities *before implementation*—including new activities introduced into an existing program or substantive changes to existing activities. This pre-implementation EIA process, defined by Reg. 216, frequently results in environmental management requirements (mitigative measures) that must be implemented and monitored over the life of the activity.

Specifically, EXCEPT for international disaster assistance activities verified as EXEMPT from the procedures, the procedures impose the following compliance requirements over life of project (LOP):

1. **Environmental considerations must be taken into account in activity planning**. (ADS 201.3.12.6 & 204.1).

2. **No activity is implemented without approved Reg. 216 environmental documentation. This documentation must be approved PRIOR to any irreversible commitment of resources.** (ADS 204.3.1).

   This documentation is the output of the EIA process specified by Reg. 216 and takes one of three forms: Request for Categorical Exclusion, Initial Environmental Examination (IEE) or Environmental Assessment (EA).

   Documentation is approved ONLY when it is signed by the Mission Environmental Officer, the Mission Director AND the Bureau Environmental Officer. As a condition of approval, most IEEs and all EAs contain environmental mitigation and monitoring requirements ("IEE or EA conditions") for at least some of the activities they cover.

   Note that Activity Approval Documents must summarize how environmental documentation requirements have been met. (ADS 201.3.12.15).

3. **All IEE and EA conditions are incorporated in procurement instruments.** (ADS 204.3.4.a.6; 303.3.6.3e).

4. **All IEE and EA conditions are implemented, and this implementation is monitored and adjusted as necessary.** (ADS 204.3.4; 303.2.f).

Operationally, this requires that:

- ✓ *Conditions established in program- ("FO"-)level IEEs and EAs are mapped to the activity level;*
- ✓ *Environmental Mitigation and Monitoring Plans (EMMPs) are developed at the project or activity level to implement these conditions. EMMPs* set out *the mitigation measures required by the IEE/EA; indicators or criteria for monitoring their implementation & effectiveness; and the parties responsible for implementation & monitoring;*
- ✓ *Project workplans and budgets specifically provide for implementation of EMMPs; and*
- ✓ *PMPs incorporate measures of EMMP implementation.*

USAID/XXX mission policy is that each of these prerequisites for successful implementation of IEE and EA conditions will be executed in full.

An annotated EMMP template is attached to this Briefing *and also available at www.encapafrica.org/meoEntry.htm and provide internal server filelink.*

5. **Environmental compliance is assessed in annual reports.** (ADS 203.3.8.7; 204.3.3.a).

   Annual reports must assess environmental compliance of existing activities, including whether all activities are covered by approved Reg. 216 environmental documentation, whether the mitigation measures specified in IEEs and EAs are being implemented, and whether these measures are adequate. If activities are discovered to be out of compliance, the report must specify actions to be taken to remedy the situation.

6. **Environmental compliance documentation is maintained in Program area Team files.** (ADS 202.3.4.6).

A more extensive discussion of LOP environmental compliance requirements is found in the Bureau for Africa's *Mission Environmental Officer Handbook*, available via www.encapafrica.org/meoentry.htm and provide internal server filelink.A hardcopy of the handbook is available for loan from the Mission Environmental Officer.

Responsibilities for Implementation

Primary responsibility: Team Leaders, CTOs, and Activity Managers. The ADS makes clear that primary responsibility and accountability for environmental compliance is shared by the USAID staff acting in the capacities of Team Leader and each CTO or Activity Manager. This includes assuring that Reg. 216 documentation is developed and in-place for activities under their purview.

Specific responsibilities established by the ADS and Mission policy for these positions are set out in the table below. All UAID/XXX staff are obliged to fulfill the enumerated environmental compliance responsibilities attendant to their position.

Final responsibility: Mission Director. Final responsibility for environmental compliance lies with the Mission Director. The Mission Director must approve all Reg. 216 documentation for Mission activities.

Field Implementation: Contractors and Implementing Partners. Environmental management must be an integral part of project implementation, and thus field implementation of environmental mitigation is the responsibility of contractors/IPs with oversight from USAID.

Advice & Gatekeeping: Mission Environmental Officer (MEO). The MEO (1) is a core member of each mission program team and serves the team as an environmental compliance advisor; (2) serves as a gatekeeper (quality and completeness reviewer) for Reg. 216 Documentation and must clear all

documentation before submission to the Mission Director; and (3) is the primary point of Mission contact with the Bureau Environmental Officer and the Regional Environmental Advisor (see "Environmental Compliance Resources and Key Contacts," below).

A more complete description of MEO roles and responsibilities is provided by the Bureau for Africa's MEO Handbook*, available via www.encapafrica.org/meoEntry.htm* and provide internal server filelink.

Regional Environmental Advisors (REAs). REAs advise MEOs and program teams on environmental compliance, including development of Reg. 216 documentation and monitoring protocols, and can assist teams in obtaining additional environmental expertise when required. REAs also help to monitor the mission's implementation of the Agency's Environmental Procedures. The MEO is the liaison with the REA on behalf of program teams. The REA supporting XXXX is based in USAID/(EA/WA/SA), CITY.

Bureau Environmental Officers (BEOs). The BEOs, based in Washington, DC, must clear all Reg. 216 documentation for activities under the purview of their Bureau. USAID/XXXX activities are under the purview of the AFR, EGAT, GH and DCHA Bureaus.

Environmental Compliance Responsibilities of Team Leaders, CTOs, Activity Managers and the MEO

Compliance action	Responsible parties
Prepare Reg 216 environmental documentation. Reg 216 documentation includes: ✓ Requests for Categorical Exclusions (RCEs) ✓ Initial Environmental Examinations (IEEs) ✓ Environmental Assessments (EAs) ✓ Amendments to all of the above	**CTO/Activity Manager** (MEO reviews/provides advice). EXCEPT: ✓ Teams may engage **partners** or **outside contractors** to prepare IEEs under the supervision of the CTO/Activity Manager. The use of external expertise is RECOMMENDED for complex programs and activities. ✓ EAs are almost always prepared by 3rd-party contractors. ✓ Title II IEEs are prepared by Implementing Partners as part of their MYAP submissions.
Approve and Clear Reg. 216 Documentation.	**All** of the following must clear: ✓ CTO, Activity Manager or Team Leader ✓ MEO ✓ Mission Director ✓ Bureau Environmental Officer
Clear sub-project/sub-grant Environmental Reviews.	**Activity Manager AND MEO** (Activities identified by the sub-project/sub-grant screening process as "high risk" are forwarded for REA & BEO review and clearance.)
Incorporate environmental compliance requirements into procurement documents.	**CTO/Activity manager** (MEO assists.)
Ensure Reg. 216 documentation is current and covers all activities being implemented.	**CTO/Activity Manager**
Assure an EMMP addressing all relevant mitigation and monitoring conditions is	**CTO/Activity Manager** (MEO may review)

Compliance action	Responsible parties
developed, and reflected in workplan, budget, and PMP.	Contractors/IPs will in most cases develop EMMPs for CTO/Activity Manager review. If they do not, this responsibility falls directly on the CTO/Activity Manager.
Monitoring to ensure partner/contractor compliance with IEE/EA conditions.	**CTO/Activity Manager** (MEO assists)
Ensure that environmental compliance lessons learned are incorporated in closure reports & environmental compliance issues are included in SOWs for evaluations.	**MEO**
Prepare environmental compliance section of Mission Annual Reports.	**MEO,** with support from CTOs and Activity Managers.
Maintain environmental compliance documentation.	**Program Officer, CTO/Activity Manager/Team Leader, MEO**

Additional Directives and Responsibilities to Assure LOP Compliance

To assure that the LOP compliance elements listed in the table above are well-implemented, the following directives and responsibilities apply Mission-wide:

1. **Awareness of Activity Determinations and Conditions.** It is the responsibility of each CTO and Activity Manager to know the **Reg. 216 Determination**, **including any conditions**, assigned to the activities under their purview. These conditions are assigned in the Reg. 216 documentation that applies to the activity. The possible determinations are enumerated in the table below:

Categorical Exclusion	The activity falls into one of the classes of activities enumerated by Reg, 216 as posing low risks of significant adverse environmental impacts, and no unusual circumstances exist to contradict this assumption. The activity has no attached environmental management conditions.
Negative Determination	Per analysis set out in an IEE, the activity is found to pose very low risk of significant adverse environmental impact. The activity has no attached environmental management conditions.
Negative Determination with Conditions	Per analysis set out in an IEE, the activity is found to pose very low risk of significant adverse environmental impact *if* specified environmental mitigation and monitoring measures are implemented. The activity proceeds on the condition and requirement that these measures ("conditions") are fully implemented.
Positive Determination	Per analysis set out in an IEE, the activity is found to pose substantial risks of significant adverse environmental impacts. Therefore, the activity cannot proceed until an Environmental Assessment (EA) is developed and duly approved, and then on the condition that environmental mitigation and monitoring measures specified by the EA are fully implemented.

   The only activities not assigned such determinations are international disaster assistance activities verified as **exempt** from the procedures. CTOs and Activity Managers must also be aware of any activities under their purview having exempt status, and when such exempt status will terminate.

2. **Team-level Compliance Planning & Compliance Verification Systems.** As specified by ADS 204.3.4, each program team must collaborate effectively with the MEO during all program designs and approvals to create a system and secure adequate resources to ensure LOP environmental compliance.

This system must include: EMMP review and approval; assuring the budgets provide for EMMP implementation, and that PMPs integrate measures of EMMP implementation. Environmental compliance verification will be part of field visits/inspections.

Note that several general and sector-specific tools exist to support field and desk assessment and tracking of partner environmental compliance. Use of these tools is recommended and may be required in some circumstances. Examples include the "Environmental Mitigation and Monitoring Tracking System" (developed in the Southern Africa region for compliance monitoring of Indoor Residual Spraying activities and the general "Site Visit Guide and Report Template." Both are available at www.encapafrica.org/meoentry.htm (Mitigation and Monitoring section) or provide internal server filelink. Contact the MEO for more information.

3. **Functional specifications for Environmental Compliance Clauses in Procurement Instruments.** The ADS states that CTOs and Activity Managers are responsible for ensuring that environmental conditions from IEEs and EAs are incorporated into solicitation and award documents (ADS 204.3.4.a.6; 303.3.6.3e). Beyond this, **it is Mission policy that environmental compliance language in all solicitation *and* award instruments specifically requires that:**

   - ✓ The partner verifies current and planned activities annually against the scope of the approved environmental documentation.
   - ✓ Where activities demand environmental management expertise, appropriate qualifications and proposed approaches to compliance are addressed in technical and cost proposals.
   - ✓ The partner develop an EMMP fully responsive to all IEE/EA conditions, unless this already exists in the Reg. 216 documentation or will be developed by Mission program staff.
   - ✓ Budgets and workplans integrate the EMMP.
   - ✓ PMPs measure EMMP implementation.

   The ADS help document *Environmental Compliance Language for Use in Solicitations and Awards* (ECL) provides a combination of step-by-step guidance and standard text to assemble environmental compliance language meeting these requirements for any solicitation or award. Its use is strongly recommended.

   The ECL and an annotated EMMP template are attached to this Order and also available at www.encapafrica.org/meoentry.htm and provide internal server filelink.

4. **Confirming Reg. 216 documentation coverage in the course of project designs, amendments, extensions, and during the preparation of the Annual Reports.** During these exercises, the Team should review planned/ongoing activities against the scope of existing, approved Reg. 216 documentation and either: (1) confirm that the activities are fully covered or (2) assure that such documentation is developed and approved *prior* to implementation. For activities begun under a disaster assistance exemption, the Team must confirm that their exempt status still applies.

   Activities modified or added during project implementation may require new or amended Reg. 216 documentation. Maintaining Reg. 216 documentation coverage of all *activities is critical, as the ADS requires that ongoing activities found to be outside the scope of approved Reg. 216 documentation **be halted** until an amendment to the documentation is approved by the Mission Director and the BEO.*

Critical Non-Compliance Situations

If any USAID/XXX staff member believes that (1) failure to implement mitigation measures or (2) unforeseen environmental impacts of project implementation is **creating a significant and imminent danger to human health or the integrity of critical environmental resources**, **IMMEDIATELY notify the CTO, MEO and Mission Management.**

Environmental Compliance Resources and Key Contacts

The on-line MEO Resource Center contains a wide range of environmental compliance and best practice materials, including step-by-step guidance for development of Reg. 216 documentation and sectoral guidance for design of environmental mitigation and monitoring measures. The Center is hosted on Africa Bureau's ENCAP website (www.encapafrica.org/meoEntry.htm) and copied in full at insert internal server filelink.

Reg. 216 documentation for Mission programs is posted at insert internal server filelink.

Key contacts. As of INSERT DATE, key environmental compliance contacts for USAID/XXX are as follows. Up-to-date contacts are available via www.encapafrica.org/meoEntry.htm.

Mission Environmental Officer	**Insert name, email and extension**
Regional Environmental Advisors (REAs) **providing support pending recruitment of a West Africa REA*	East and Central Africa (USAID/EA, Nairobi) *Chris Dege: cdege@usaid.gov; David Kinyua: dkinyua@usaid.gov* Southern Africa R (USAID/SA, Pretoria) *Camilien J.W. Saint-Cyr: csaint-cyr@usaid.gov** West Africa (USAID/WA, Accra) *Ron Ruybal: rruybal@usaid.gov*
Bureau Environmental Officers (BEOs; Washington, DC)	Bureau for Africa (AFR/SD) *Brian Hirsch: bhirsch@usaid.gov* Bureau for Economic Growth, Agriculture & Trade Bureau (EGAT): *Joyce A. Jatko: jjatko@usaid.gov* Democracy, Conflict and Humanitarian Assistance (DCHA): *Erika Clesceri: eclesceri@usaid.gov* Global Health (GH/HIDN) *Theresa Bernhard, tbernhard@usaid.gov*