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Participants' Sourcebook:

Life of Project Environmental Compliance and Environmentally Sound Design and Management:

A Training Workshop for USAID/Malawi Staff and Partners

11 – 15 March, 2013
Lilongwe, MALAWI



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Participants' Sourcebook: Life-of-Project Environmental Compliance and Environmentally Sound Design and Management

A Regional Training Workshop for USAID Staff and Partners

Lilongwe, Malawi
11 – 15 March, 2013

Host:
USAID/Malawi

Sponsor:
USAID/Malawi



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DISCLAIMER

The views expressed in this document do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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Cover photo: Rosie Chekenya, 2012

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AGENDA

(Version date: 14 February 2013)

USAID/Malawi Life-of-Project Environmental Compliance and Environmentally Sound Design & Management Workshop

Lilongwe, Malawi

11 – 15 March, 2013

Training Objective:

The overall goal of the workshop is to strengthen environmentally sound design and management of USAID-funded activities in Malawi by assuring that participants have the motivation, knowledge and skills necessary to: (1) achieve environmental compliance over life-of-project; and (2) otherwise integrate environmental considerations in activity design and management to improve overall project performance and sustainability.

Key Activities:

- Day 1 Overview of ESDM and skill-building in Environmental Impact Assessment (EIA).
- Day 2 Explain USAID Environmental Procedures and compliance documentation; prepare for Day 3 site visits.
- Day 3 Complete site visits and develop EMMPs; begin small-group presentation of findings and recommendations.
- Day 4 Wrap up core training content and complement with discussion of special topics.
- Day 5 Synthesize workshop proceedings and skill-building and consider professional and organizational next steps.

| Day/Time | Module | Objective/Content Summary |
|--------------|---|---|
| Day 1 | Motivation, Core Skills and Overview of Environmental Compliance over Life of Project | |
| 8:30-9:00 | Participant Registration | |
| 9:00-9:15 | Welcome and Opening Statements | Highlight the value of workshop content and expected results. |
| 9:15-9:45 | Session 1: Workshop Objectives and Logistics; Participant Introductions | Establish workshop objectives; brief the agenda and learning approach. Review logistics. Introduce participants; articulate expectations. |
| 9:45-10:00 | Break | |
| 10:00-11:15 | Session 2: Environmentally Sound Design & Management (ESDM) as a Foundation for Environmental Compliance <i>Presentation and dialogue</i> | Motivate the need to systematically address environmental considerations in development activities. Understand linkage between ESDM and project success, consider examples from Malawi. View this process in the context of environmental compliance. |
| 11:15-12:00 | Session 3: Environmentally Sound Design & Management (ESDM) in the Malawian Context <i>Technical presentation and dialogue</i> | Review and discuss socio-cultural considerations in the application of ESDM in Malawi. |
| 12:00-13:00 | Lunch | |
| 13:00-14:00 | Session 4: Fundamental Skills of Environmental Impact Assessment (EIA) <i>Technical presentation and dialogue</i> | Define key terms—baseline, impact, activity—and learn essential classroom theory for baseline characterization, impact identification & mitigation design and how they apply in the EIA framework; the EIA framework is the basis for USAID Environmental Procedures. |

| Day/Time | Module | Objective/Content Summary |
|-----------------|--|--|
| 14:00-15:30 | Session 5a: Site Assessment Exercise <i>Presentation and small-group work</i> | Receive instruction on the methodology and objectives of the Site Assessment. Understand the proposed activity and baseline conditions to be assessed. Divide into small groups for the exercise. Practice observation and assessment skills needed to characterize the baseline situation and identify impacts/issues of concern. |
| 15:30-15:45 | Break | |
| 15:45-16:30 | Session 5b: Site Assessment Exercise— Synthesis and Report-out <i>Group work and dialogue</i> | Synthesize field observations and prioritize impacts/issues of concern; discuss possible approaches for limiting adverse effects on the environment. Small groups present and discuss findings. |
| Day 2 | Motivation, Core Skills and Overview of Environmental Compliance over Life of Project | |
| 8:30-9:30 | Session 6: Environmental Impact Assessment and “USAID Environmental Procedures”: the Initial Environmental Examination (IEE) and Beyond <i>Technical presentation and dialogue</i> | Review USAID’s implementation of the EIA process and the preparation of project environmental compliance documents; understand how these documents establish environmental management criteria for USAID-funded activities. |
| 9:30-10:15 | Session 7: The Environmental Impact Assessment (EIA) Process in Malawi | Understand national- and local-level EIA requirements and procedures in Malawi and how they apply to USAID-funded activities. |
| 10:15-10:30 | Session 8a: IEE Critique – Introduction and Overview | Receive instruction on the methodology and objectives of the IEE Critique. Convene small groups for the exercise. |
| 10:30-10:45 | Break | |
| 10:45-12:00 | Session 8b: IEE Critique – Small-Group Synthesis and Report-out | Discussion of illustrative IEE. Small groups present critical review/findings. |
| 12:00-13:00 | Lunch | |
| 13:00-14:00 | Session 9: Principles of Environmental Monitoring <i>Technical presentation and dialogue</i> | Review key aspects of monitoring to ensure that project environmental compliance requirements are met and potential adverse impacts effectively mitigated; highlight the selection of clear and cost-effective monitoring indicators. |
| 14:00-15:00 | Session 10: The Environmental Mitigation and Monitoring Plan (EMMP) <i>Technical presentation and dialogue</i> | Understand the EMMP concept and formats: Who develops them. Their role in “operationalizing” key elements of USAID Environmental Procedures and establishing and maintaining project environmental compliance. Introduce key guidance: <i>EMMP Factsheet</i> . |
| 15:00-15:15 | Break | |
| 15:15-15:30 | Session 11: Introduction to the USAID <i>Environmental Guidelines for Small-Scale Activities in Africa</i> + Similar Resources <i>Presentation</i> | Deepen familiarity with environmental resources and guidelines, particularly the <i>Environmental Guidelines for Small-Scale Activities in Africa</i> (EGSSAA). |
| 15:30-16:30 | Session 12a: Site Visit Component— Brief and Classroom Preparation <i>Presentation and small-group work</i> | Gain a general awareness of the case study sites that will be visited in the field on Day 3. Divide participants and distribute technical resources. Discuss potential adverse impacts of the case study site activities. Review background and reference materials and discuss approach for EMMP development in small-group format. |

| Day/Time | Module | Objective/Content Summary |
|---|--|---|
| Day 3 Complete site visits and develop EMMPs | | |
| 8:00-13:00 (includes return from field) | Session 12b: Site Visit Component— Experiential Practice Developing an EMMP <i>Field visit</i> | Build and apply the core Environmental Analysis skills briefed in Day 1 and Day 2 via a field visit and follow-up group work to: 1) synthesize field observations; and 2) identify possible mitigation measures for the top two or three issues/impacts of concern at each site, with reference to the EGSSAA. |
| 13:00-14:00 | Refresh and lunch | |
| 14:00-16:00 (tea break taken at leisure) | Session 12c: Develop EMMP and Prepare Small-Group Presentation <i>Small group work</i> | Advance discussions and compilation of field visit results into an EMMP format and a group presentation. |
| 16:00-16:30 | Session 12d: EMMP Group Presentations <i>Group presentations in plenary</i> | Articulate field visit findings, analysis, and EMMP development. |
| Day 4 Special Topics | | |
| 8:30-10:00 | Session 12d (cont'd): EMMP Group Presentations <i>Group presentations in plenary</i> | |
| 10:00-10:15 | Break | |
| 10:15-11:00 | Session 13: Environmental Compliance Reporting <i>Technical presentation and dialogue</i> | Guidance on EMMP-related and other environmental compliance reporting, including integration with broader project M&E and PMP reporting requirements. |
| 11:00-12:30 | Session 14: Environmental Compliance/ESDM Knowledge Game <i>Small-group competition</i> | Reinforce key “core session” content in a small-group competition. |
| 12:30-13:30 | Lunch | |
| 13:30-14:30 | Session 15: Special Topic—Pesticide Risks, Safer Use & Compliance <i>Technical presentation and dialogue</i> | Brief the environmental, economic and human-health concerns related to pesticide use. Achieve a common understanding of the special environmental compliance requirements that apply to pesticide use and procurement. Review key elements of safer pesticide use, including Integrated Pest Management (IPM) and the use of Personal Protective Equipment (PPE). |
| 14:30-15:15 | Session 16: Special Topic—Global Climate Change <i>Technical presentation and dialogue</i> | Review the role and impact of Global Climate Change (GCC) on the design and implementation of USAID/Malawi activities; understand the capacity of ESDM to mitigate the effects of GCC. |
| 15:15-15:30 | Break | |
| 15:30-16:30 | Session 16 (cont'd): Special Topic—Global Climate Change | |

| Day/Time | Module | Objective/Content Summary |
|--------------|--|--|
| Day 5 | Way Forward | |
| 8:30-9:00 | Session 17: Special Topic—Water Quality Testing <i>Technical presentation and dialogue</i> | Review the requirements and procedures involved with water quality testing in USAID-funded development programs. |
| 9:00-10:00 | Session 18: Special Topic—Subproject Review: Using the Africa Bureau Environmental Review Form/Report Process <i>Technical presentation and dialogue</i> | Understand the subproject review process, its appropriate use, and the responsibilities its places on USAID and Partners; introduce the Environmental Review Form (ERF) and Environmental Review Reports (ERR). |
| 10:00-10:15 | Break | |
| 10:15-10:30 | Session 19: Parking Lot Session <i>Plenary session</i> | Address unresolved questions or issues and summarize information presented throughout the training. |
| 10:30-11:00 | Session 20: Roles, Responsibilities & Resources <i>Technical presentation and dialogue</i> | Summarize the various responsibilities of USAID staff and Implementing Partners (IPs); introduce additional key resources available to support environmental compliance and ESDM. |
| 11:00-12:15 | Session 21: Bringing Curricula to Reality <i>Group discussions followed by individual action planning</i> | With the technical training now complete, participants will share perspectives on environmental management priorities and challenges for USAID activities in Malawi. These and other insights will be used to frame lessons-learned and identify practical actions that can be operationalized as part of project implementation. |
| 12:15-12:30 | Workshop Final Evaluations | Participants complete evaluation form. |
| 12:30 | Closing Ceremony | Conclude workshop and distribute certificates. |

Acronyms

| | | | |
|---------|---|----------|--|
| ADS | (USAID) Automated Directives System | GHG | Greenhouse gas |
| AFR | USAID Bureau for Africa | IEE | Initial Environmental Examination |
| AFR/SD | USAID Bureau for Africa, Office of Sustainable Development | IQC | Indefinite Quantity Contract |
| AOR | Agreement Officer's Representative | IRS | (Anti-malarial) Indoor Residual Spraying |
| AOTR | Agreement Officer's Technical Representative (now superseded by AOR) | ITN | Insecticide-Treated (bed) Net |
| Asia/ME | USAID Bureaus for Asia and the Middle East | IP | USAID Implementing Partner |
| BEO | Bureau Environmental Officer | LOE | Level of Effort |
| BFS | USAID Bureau for Food Security | LOP | Life-of-Project |
| BPR | Environmental Procedures Best Practices Review | M&E | Monitoring & Evaluation |
| CFR | Code of (US) Federal Regulations | M&M | (Environmental) Mitigation and Monitoring |
| COP | Chief-of-Party | MCC | Millennium Challenge Corporation |
| COR | Contracting Officer's Representative | ME | USAID Bureau for the Middle East |
| COTR | Contracting Officer's Technical Representative (now superseded by COR) | MEO | Mission Environmental Officer |
| DCHA | USAID Bureau for Democracy, Conflict and Humanitarian Assistance | NGO | Non-Governmental Organization (see also PVO) |
| EA | Environmental Assessment; Eastern Africa | NRM | Natural Resources Management- |
| ECL | Environmental Compliance: Language for Solicitation and Awards (ADS 204 Help Document) | OIG | Office of the (USAID) Inspector General |
| ECSR | Environmental Compliance Status Report | OMEPA | USAID Office of Middle East Programs |
| EGSSAA | (USAID/AFR's) <i>Environmental Guidelines for Small-Scale Activities in Africa</i> | PEA | Programmatic Environmental Assessment |
| EIA | Environmental Impact Assessment | PEPFAR | President's Emergency Plan for AIDS Relief |
| EMMP | Environmental Mitigation & Monitoring Plan | PERSUAP | Pesticide Evaluation Report and Safer Use Action Plan |
| EMPR | Environmental Management Plan & Report | PMP | Performance Monitoring Plan |
| ENCAP | Environmentally Sound Design and Management Capacity-Building Support for Africa (GEMS predecessor program supporting Africa Region under the EPIQ II IQC.) | PMI | Presidential Malaria Initiative |
| ERF | Environmental Review Form | POC | Point of Contact |
| ERR | Environmental Review Report | ppb | parts per billion |
| ESDM | Environmentally Sound Design & Management | PVO | Private Voluntary Organization |
| FAA | (US) Foreign Assistance Act | RCE | Request for Categorical Exclusion |
| FO | Functional Objective (under the Foreign Assistance Programming Framework) | REA | Regional Environmental Advisor |
| FTF | Feed the Future (President's Feed the Future Global Health and Food Security Initiative) | RUP | Restricted Use Pesticide |
| GCC | Global Climate Change | 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 |

Session 1.

Workshop Objectives and Logistics; Participant Introductions

Summary

This session briefs the workshop and its agenda, introduces us to each other, and establishes expectations. Specific elements of the session are:

- Overview of course objectives, learning approach, agenda and materials
- Participant and facilitator introductions
- Solicit expectations
- Address logistical considerations
- Create a “Parking Lot”

This workshop will provide intensive training in: (1) compliance with USAID’s environmental procedures over life-of-project, and (2) in the objectives of these procedures: environmentally sound design and management (ESDM) of USAID-funded activities.

Overall Goal: The overall goal of the workshop is to strengthen environmentally sound design and management of USAID-funded activities in Malawi by assuring that participants have the *motivation, knowledge and skills necessary* to (1) achieve environmental compliance over life-of-project, 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 field-based:

- 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 EIA skill-building and LOP compliance are built around 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!***

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

| | | | |
|--|----------------------------------|---------------------------------------|----------------------------------|
| VALUING DIVERSITY | COMFORTABLE ATMOSPHERE | ACTIVE PARTICIPATION OF ALL MEMBERS | SHARED GOALS AND OBJECTIVES |
| BALANCED APPROACH TO PROCESS AND CONTENT | WHAT EFFECTIVE TEAMS NEED | | EFFECTIVE COMMUNICATION |
| SHARED LEADERSHIP | | | CONSTRUCTIVE CONFLICT MANAGEMENT |
| ACTION ACCOUNTABILITY RESPONSIBILITY | MUTUAL TRUST | CRITICAL ANALYSIS AND PROBLEM-SOLVING | A PREFERENCE FOR CONSENSUS |

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

Session 2.

Environmentally Sound Design & Management (ESDM) as a Foundation for Environmental Compliance

Technical presentations and dialogue

Summary

This session will explain ESDM and illustrate its vital role in achieving and maintaining environmental compliance over the full project lifecycle. In order to establish this important relationship, we will:

- Develop a common understanding of the term “environment”
- Highlight some of the “big picture” environmental trends affecting human health and livelihoods in Southern and 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 & Management (ESDM)**!

- Consider specific examples from Malawi of the linkage between ESDM and successful project outcomes

This session will also highlight the most common root causes of ESDM failures or lapses and set out the basic rules or principles for achieving ESDM.

While the session will introduce the concept and practice of environmental compliance, specific USAID regulations and requirements will be addressed in finer detail on Day 2 of the workshop (Session 6, primarily).

Objectives

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

Environmentally Sound Design & Management: a Foundation for Environmental Compliance

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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

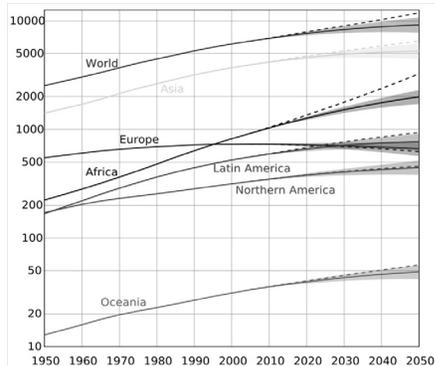
What are some "big-picture" environmental trends affecting human health and livelihoods in Southern Africa? Are they important in Malawi?

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1. Population growth

UN Population estimates:*

| | 2015 | 2050 | % change |
|--------------------------|---------|----------|----------|
| World** | 7.28 bn | 9.31 bn | +28% |
| Africa** | 1.15 bn | 2.19 bn | +90% |
| E. Africa** | 369 mn | 779.6 mn | +111% |
| Malawi | 17.5 mn | 49.7 mn | +184% |
| Less-Developed Regions** | 6.03 bn | 7.99 bn | +32.5% |
| LDCs | 931 mn | 1.73 bn | +86% |



* All data: "medium variant" projection.
UN Population Division (http://esa.un.org/wpp/unpp/panel_population.htm)

**includes Malawi

Increasing
Population in
Malawi

**LEADS
TO**

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

2. Urbanization

UN Population estimates:*

| | Urban pop as % of total | | % change in total urban population |
|--------------------------|-------------------------|-------|------------------------------------|
| | 2015 | 2050 | |
| World** | 53.9% | 67.2% | +59.2% |
| Africa** | 41.1% | 57.7% | +169% |
| E. Africa** | 25.2% | 44.7% | +275% |
| Malawi | 16.3% | 31.5% | +448% |
| Less-Developed Regions** | 48.7% | 64.1% | +74.5% |
| LDCs | 30.3% | 49.8% | +205% |



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

* UN Population Division
(http://esa.un.org/unpd/wup/unup/index_panel1.html)

**includes Malawi

Most urban growth in the next 35 years in developing countries

**LEADS
TO**

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

Global change + population growth = INCREASED WATER STRESS
 Greatest impacts on poor, subsistence agriculture.

AREAS OF PHYSICAL AND ECONOMIC WATER SCARCITY



Source: Comprehensive Assessment of Water Management in Agriculture, 2007

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. . .

Why are “environmental mistakes” made?

Sometimes obvious (previous examples).

But often difficult to foresee, predict

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

Failure to understand system complexity

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?

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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!



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Common Root Cause #4: Failure to understand system complexity



Photo: UNESCO-IHE

Ponds excavated for fill to build-up ground level in villages for flood protection

Ponds provided a source of organic carbon which settles to bottom of pond, seeps underground and is metabolized by microbes

Created conditions for mass arsenic poisoning when villages switched from surface water to “cleaner” tube wells.

creates chemical conditions that cause naturally occurring arsenic to dissolve out of the sediments and soils and move into groundwater

Today ~3000 Bangladeshis die each year of -induced cancer; 2 mn live with chronic poisoning

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



In short, how can we achieve . . .

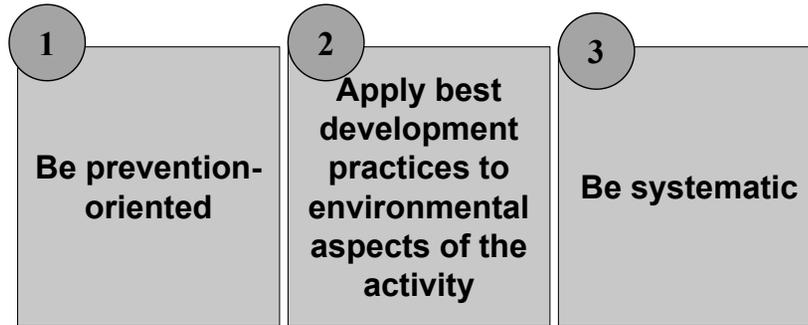
Environmentally Sound Design & Management (ESDM)?

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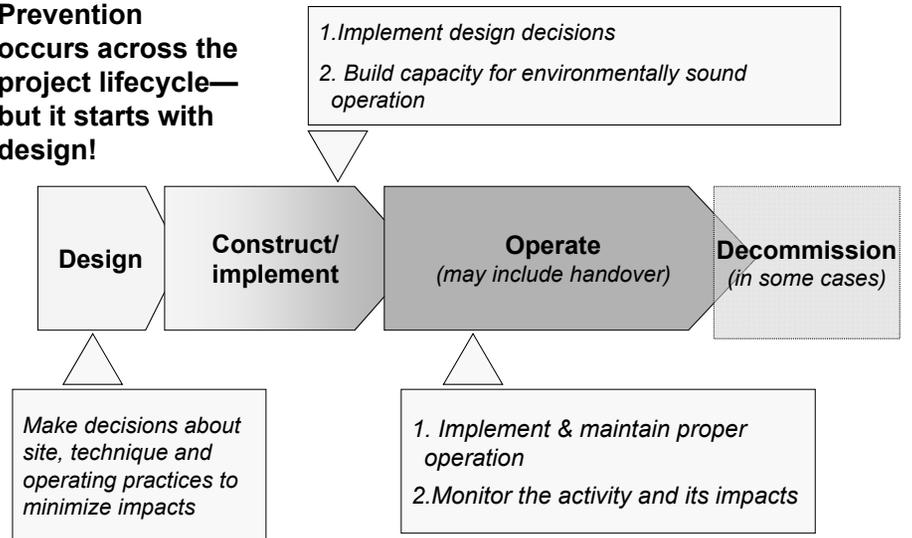
How do we achieve ESDM?

3 basic rules:



1 Be prevention-oriented

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

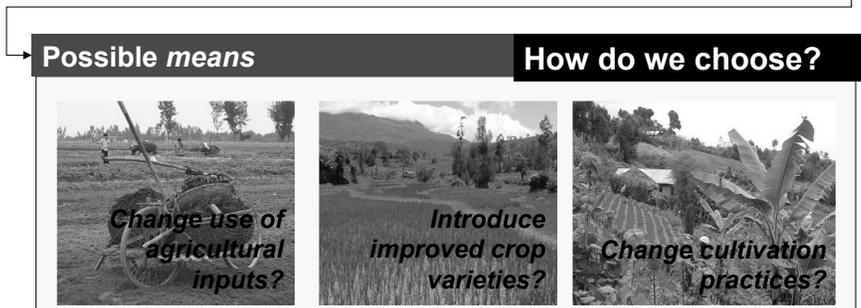


ESDM is prevention-oriented

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

Objective

Improve agricultural productivity



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 environmental aspects of the activity

AND design for climate change

BP #1: Technically sound design

Environmental application:

The design must be appropriate for local environmental conditions ...taking into account likely climate change.

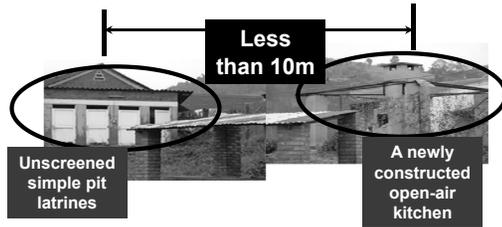
... Rainfall, temperature, soils, flood, drought and earthquake potential, the built environment. . .

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 environmental 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

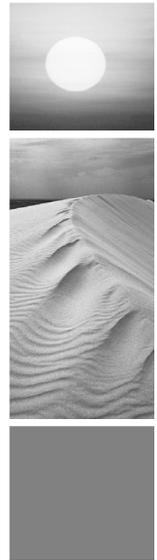
BUT IN ADDITION

USAID Policy!

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.



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

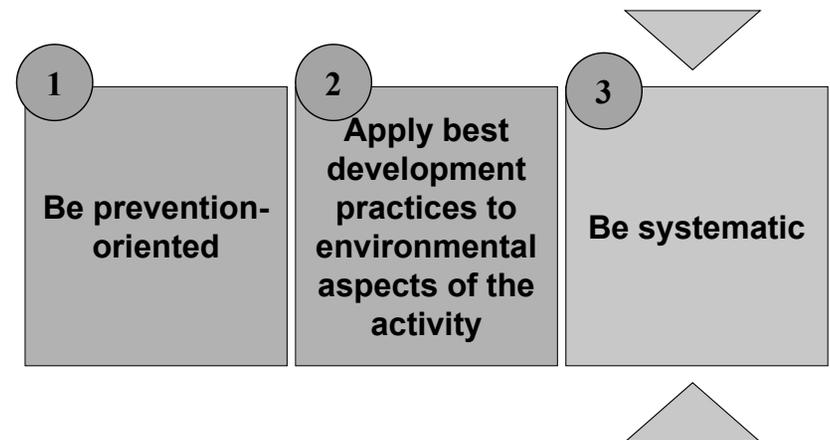
Tree-planting.

Land management (sustainable grazing, cropping)



Soil carbon measurement by hand in Senegal

Now, rule 3 for achieving ESDM. . .



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)!**

Session 3.

Environmentally Sound Design & Management (ESDM) in the Malawian Context

Technical presentation and dialogue

Summary

This session will offer a closer look at ESDM in Malawi given prevailing socio-economic and cultural considerations, including gender, education, and wealth. As discussed in the previous session, one of the development ‘best practices’ for achieving ESDM is designing activities that account for the policy and social context. Participants will have the opportunity to consider particular aspects of the Malawian culture that may facilitate—or hinder—the successful application of the principles of ESDM.

These important dimensions should be factored into the design and implementation of all USAID-funded activities in Malawi. Beyond facilitating ESDM, cultural attributes may also be used to promote specific environmental compliance requirements. The session will conclude with a group discussion allowing for further exploration of the most compelling topics.

Objective

Understand the potential advantages and limitations of pursuing ESDM-based development outcomes given the predominant cultural, social and economic context in Malawi.

Session 4.

Fundamental Skills of Environmental Impact Assessment (EIA)

Technical presentation and dialogue

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 the *means and measures to effectively mitigate* these impacts.

Fundamental skills of the EIA process will also be introduced and explained, including:

- 1) characterizing the **baseline situation**;
- 2) identifying (and evaluating) the potential adverse **impacts** of planned development activities (issues of concern); and
- 3) developing a **mitigation** strategy to address these impacts.

The session will further illustrate how the EIA process aligns with ESDM and establish that this process is the internationally accepted standard framework for achieving ESDM in project-based development. The linkage between EIA and USAID Environmental Procedures will also be established.

Discussion of Fundamental EIA Skills

This session addresses the essential EIA skills of baseline characterization, impact identification and mitigation design. (A fourth “core” skill—monitoring—is addressed in a subsequent session). These skills will be put to practice in the workshop’s field-based activities.

Baseline Characterization & Identifying Impacts of Concern

This portion of the session explains the basic, logical process behind baseline characterization and identifying impacts (or issues) of concern. An example from a real and typical small-scale irrigation project will illustrate why the fundamental EIA skills of baseline characterization and issue identification are directly relevant to effective mitigation and achieving ESDM.

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 comprehensive EIA study. But for most small-scale activities and preliminary assessments (or USAID-mandated IEEs), the simple, logical process described here—supported by good judgment and the information contained in the *Small Scale Guidelines* or similar resources—is sufficient.

Mitigation Design

The purpose of the EIA process is not simply to identify and 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 (addressed in a subsequent session) is its essential complement, required to verify whether the mitigation measures are sufficient, effective—and actually implemented.

This portion of the session:

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

Objectives

- Achieve a basic understanding of the EIA process and how it is implemented
- Become familiar with core EIA skills and the technical approach to EIA activities
- Promote the EIA framework as the internationally accepted standard process for achieving ESDM in project-based development
- Establish EIA as the basis of USAID Environmental Procedures

Key Resources

- “IV.1: Topic Briefing—Introduction to EIA” in the *Environmental Guidelines for Small Scale Activities*. (USAID/AFR/SD; available at www.encapafrika.org/egssaa.htm) is a general resource for core EIA skills.
- The individual sector chapters of the *Environmental Guidelines for Small-Scale Activities* are a key resource for: (1) identification of potential adverse environmental impacts; and (2) design of specific mitigation and monitoring measures.

Fundamental Skills of Environmental Impact Assessment (EIA)

GEMS Environmental Compliance-ESDM Training Series
USAID/Malawi • March 2013

Session Objectives:

- Define Environmental Impact Assessment (EIA)
- Explain the EIA process
- Develop fundamental EIA skills; learn basic approach
- Illustrate EIA framework as the internationally accepted standard process for achieving ESDM
- Establish EIA as the basis of USAID Environmental Procedures

2

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.

3

What is an activity?

The EIA process examines the impacts of **activities**.

✓ An activity is:

A desired accomplishment or output.

A project or program may consist of many activities.

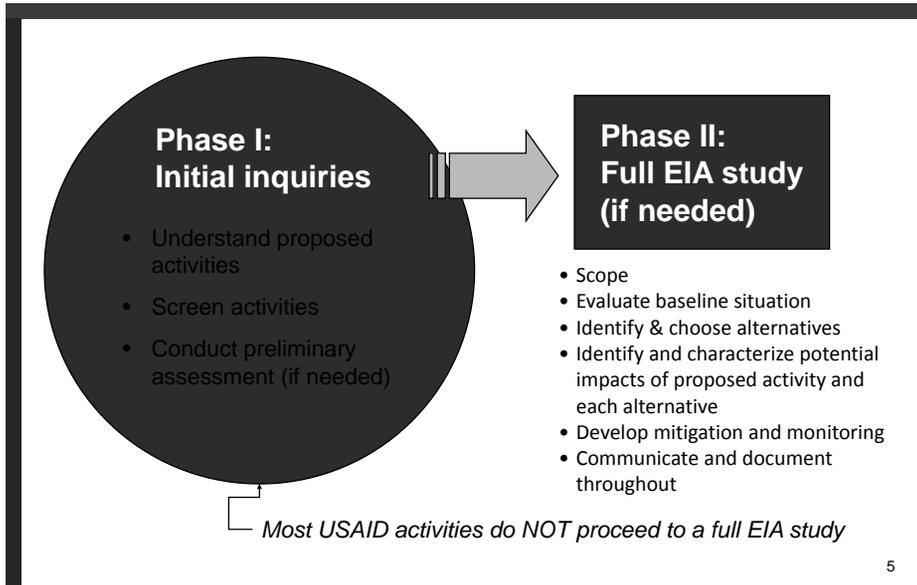
Accomplishing an activity requires a set of **actions**

| ACTIVITY: | ACTIONS: |
|-----------------------------|---|
| increase sorghum production | <ul style="list-style-type: none"> • Provide inputs (seeds, fertilizer, pesticides) • Design and construct irrigation infrastructure • Increased access to finance, lending • Road rehabilitation • Capacity building and technical assistance |

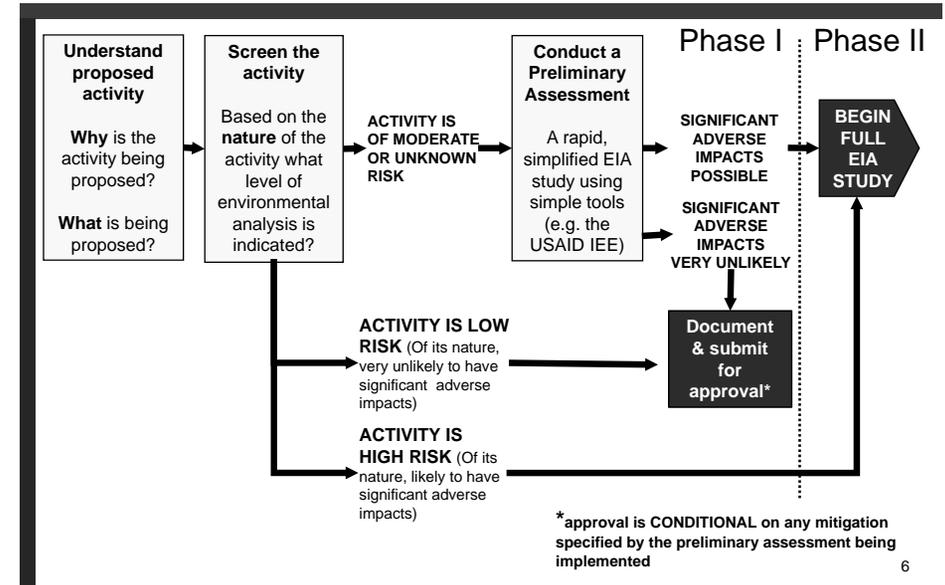
What are some of your activities?

4

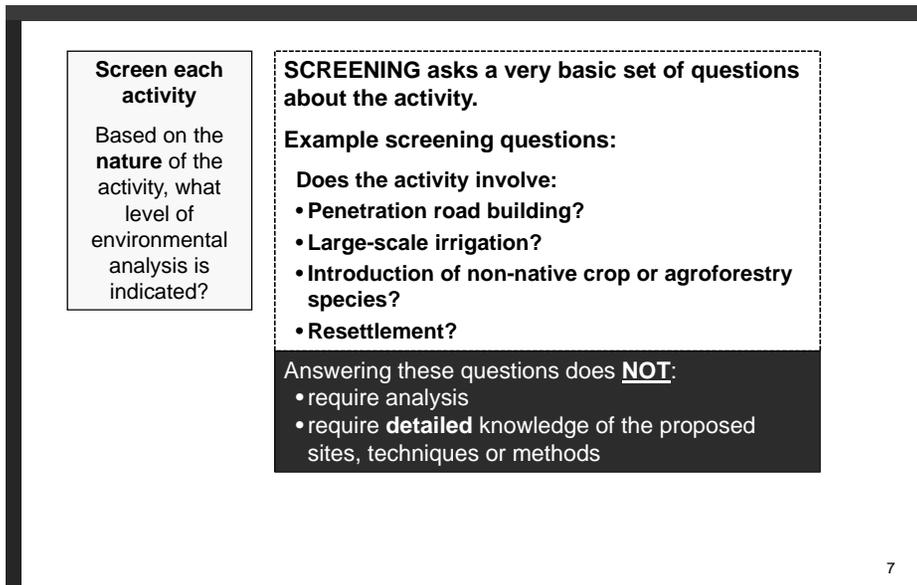
The EIA process



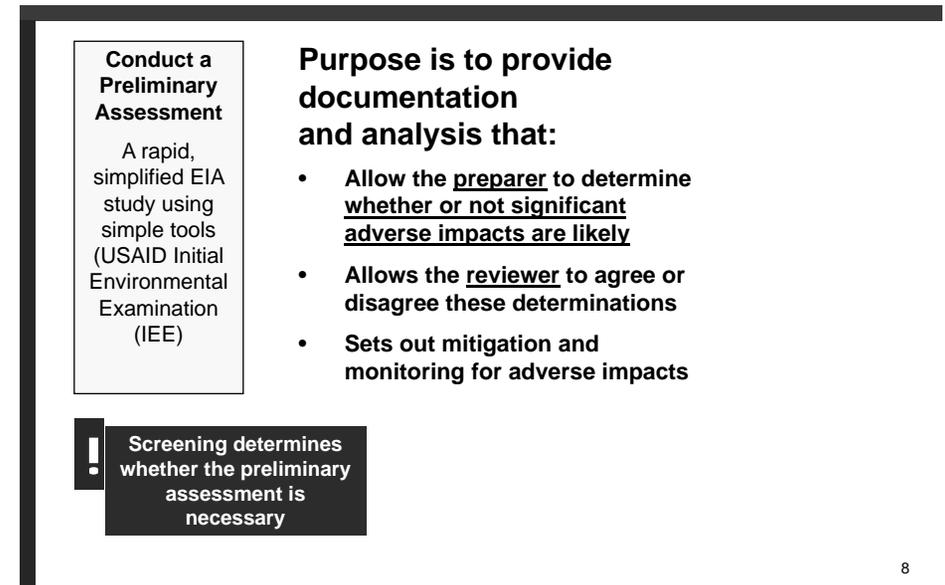
Phase I of the EIA process



Phase I: Screen the activity



Phase I: Preliminary Assessment



Phase I: 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 **specified mitigation and monitoring**,
- **likely** to have significant adverse impacts (full EIA study is required)

9

When to Proceed

We only proceed to Phase II of the EIA process

IF

Phase I indicates that a FULL EIA STUDY is required

10

Phase II: Full EIA Study

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

However, the full EIA study differs in important ways:



A formal **scoping process** precedes the study to **identify 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 required

A **professional EIA team** is usually required

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

11

Fundamental EIA Skills

There are “core” skills that are central to environmental impact assessment:

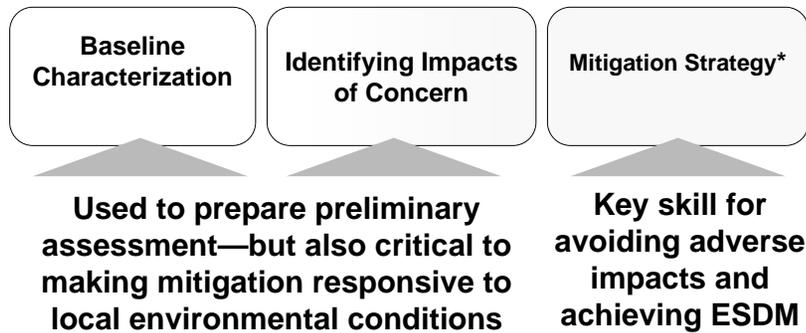
- Baseline characterization
- The identification of potential adverse impacts (or impacts of concern)
- Developing a mitigation strategy

How do I approach the EIA process?



12

Fundamental EIA Skills



* Monitoring is the essential complement to mitigation; it is required to verify whether the mitigation measures are sufficient, effective—and actually implemented. Monitoring is addressed in a subsequent session.

13

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

14

Where do I obtain information on 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

15

Identifying impacts of concern

What is an impact?

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

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

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

Important:
Baseline situation is not just a "snapshot in time"

16

Types of impacts & their attributes

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

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

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

But all impacts are NOT treated equally.

17

Focus!

! ESSENTIAL to focus on the most significant impacts

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

18

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

5

Given:

1. the baseline conditions,
2. the project concept/design, and
3. How the adverse impacts arise,

decide which impacts are of concern

19

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

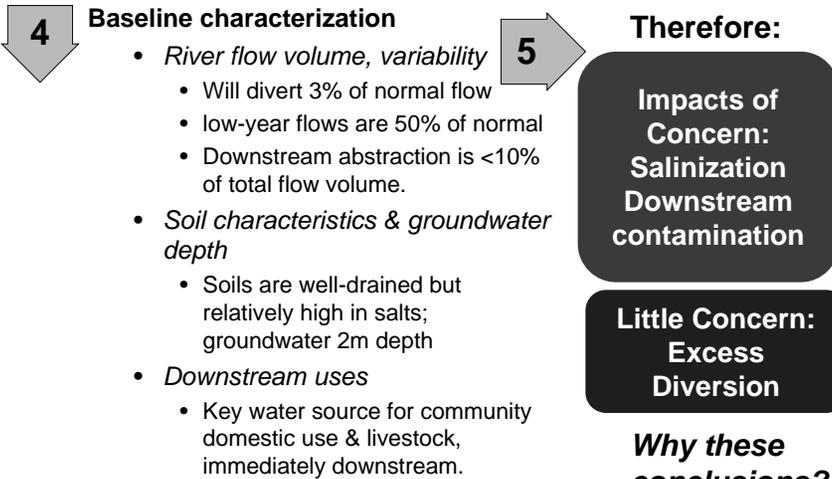
3 Key elements of baseline:

- River flow volume, variability
- Soil & water characteristics & groundwater depth
- Downstream uses



20

Impact evaluation: EXAMPLE



21

Mitigation Design

A critical part of the EIA process—and of ESDM

Mitigation is . . .

The implementation of measures designed to eliminate, reduce or offset the undesirable effects of a proposed action on the environment.

22

How does mitigation reduce adverse impacts?

| Type of mitigation measure | How it works | Examples |
|--|---|--|
| Prevention and control measures | Fully or partially prevent an impact/reduce a risk by: <ul style="list-style-type: none"> ▪ <i>Changing means or technique</i> ▪ <i>Changing or adding design elements</i> ▪ <i>Changing the site</i> ▪ <i>Specifying operating practices</i> | 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

23

Must EVERY impact be mitigated?

Mitigation specified in Phase I or Phase II of EIA process must be implemented

Environmental management criteria often require judgment in designing specific mitigations. 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

24

Prevention is best

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

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

25

Three rules for Environmentally Sound Design & Management (ESDM)

1

Be prevention-oriented

2

Apply best development practices to environmental aspects of the activity

3

Be systematic

Properly implemented, the EIA process makes them a reality.

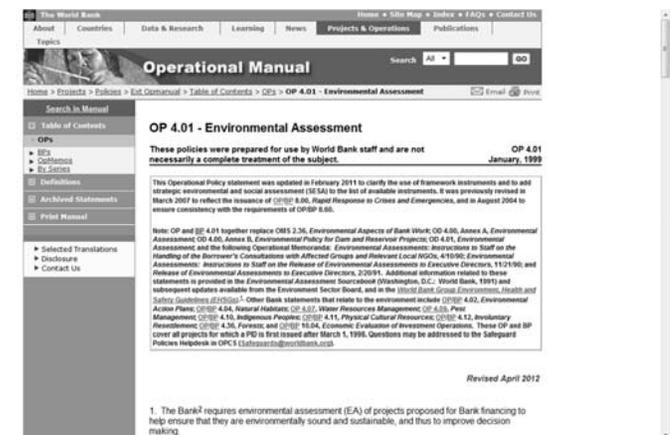
Environmental Impact Assessment: a universal requirement



- From its beginnings in the 1970 US National Environmental Policy Act. . .
- 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, EIA is the core of national environmental regulation
- Most countries & almost all donors (**including USAID**) now have EIA requirements

27

Environmental Impact Assessment: The World Bank



"The Bank requires environmental assessment (EA) of projects proposed for Bank financing to help ensure that they are environmentally sound and sustainable, and thus to improve decision making."

28

Malawi: Environmental Management Act of 1996

MALAWI

The Malawi Gazette Supplement, dated 16th August, 1996, containing
Acts (No.7c)

(Published 16th August, 1996)

ACT

No. 23 of 1996

I assent

Bakili Muluzi
President
5th August, 1996

PART V - ENVIRONMENTAL IMPACT ASSESSMENT, AUDITS AND MONITORING

24. Projects for which an environmental impact assessment is required
25. Environmental impact assessment reports
26. Review of environmental impact assessment reports
27. Environmental audits
28. Monitoring existing projects
29. Fees

29

Summary

- EIA is an established process that promotes sustainable environmental management and successful development outcomes.
- Core skills are needed to implement the EIA process and to help achieve ESDM; these are:
 - Baseline characterization
 - Identifying impacts of concern
 - Mitigation design
- EIA enables ESDM-focused development, and is the basis for USAID Environmental Procedures

30

Session 5.

Site Assessment: Applying Fundamental EIA Skills

Field-based practical exercise and small group work

Summary

This session provides participants with an interactive learning experience, offering field-based practice of core Environmental Impact Assessment (EIA) skills. In small-group format, participants will use a brief site visit followed by consultation and discussion to advance understanding of baseline characterization and the identification of impacts of concern.

Session 5a

Participants will be briefed on the various sites to be visited as part of this exercise. A short description of each site will be provided, and participants will generally have the opportunity to select which site they would like to visit. However, in certain circumstances, the facilitation team may find it necessary to assign participation to certain groups to accommodate logistical limitations in transport to/from the respective sites, as well as the capacity of sites to be visited.

Once the participants have self-selected into small groups according to interest/sites to be visited, each small group will need to identify a Chairperson and Spokesperson:

- The Chairperson will be responsible for ensuring that the group's efforts are focused, and responsive to the objectives of the exercise. The Chairperson will also bring all voices and perspectives into the discussion of baseline characterization and the identification of impacts of concern. On a practical note, the Chairperson will also make sure everyone is in the vehicle for the trip home!
- The Spokesperson will be responsible for capturing the consensus opinion(s) or assessments of the group and effectively conveying key aspects to the training group at large. The spokesperson should be able to follow closely the nature of the group's discussion, and record the proceedings in a manner that makes for compelling presentation.

Session 5b

Participants will depart the training venue as part of their small group for travel to the selected sites. Transportation will be coordinated and logistical arrangements are already in place. At a minimum, the Chairperson *may* be provided with the contact information of the host/guide at each of the various sites.

Once arrived at your site, please observe and ask questions, offer and discuss observations within the group, and record your findings (both through notes and photographs). But the most important thing is to have your eyes and ears open and to be observing the environment, and the interaction with the environment of activities taking place around you. Consider a key point of the previous session:

Core skills are needed to implement the EIA process and to help achieve ESDM; the first two of these are:

- Baseline characterization; and
- Identifying impacts of concern

This portion of the exercise will conclude upon each group's return to the training venue. By that time each group should have recorded and generally reached agreement on the baseline environmental conditions present—and that are relevant—at their site.

By conclusion of the site visit proper each group member should also be cognizant or aware of potential environmental impacts, and which of those impacts, given the baseline conditions, require additional study or consideration—these are the impacts of concern. Discussion of the various impacts within the small groups will continue in the following session.

Session 5c

Following return from the field, each small group will convene to discuss the range of impacts observed at their site and which of those impacts may require more thorough treatment through application of the EIA process. Each group will prepare a brief report-out (5 minutes, maximum) that highlights aspects of the baseline characterization and identifies the top 2 or 3 impacts of concern.

The small groups may also briefly suggest potential options for mitigating the impacts of concern that they have identified. However, this is not required—we will spend considerable time in the coming days understanding how to design and implement mitigation measures in response to specific impacts or types of impacts.

Objective

Use a field-based exercise to practice and apply the fundamental Environmental Impact Assessment (EIA) skills of baseline characterization and identifying impacts of concern. Recognize the multi-disciplinary nature of effective EIA and the need for a systematic approach to understanding and prioritizing environmental impacts.

Session 6.

Environmental Impact Assessment and USAID Environmental Procedures: the Initial Environmental Examination (IEE) and Beyond

Technical presentation and dialogue

Important note:

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

Summary

The preceding workshop sessions have:

- Described ESDM as a key objective for the ethical and effective practice of development
- Explained the EIA process and the fundamental skills of baseline characterization, impact identification, and mitigation design
- Highlighted EIA as the framework for achieving ESDM in project-based development activities, and as the basis for USAID Environmental Procedures
- Provided an opportunity to test and apply fundamental EIA skills in a field-based exercise

USAID is *required by both court settlement and US law* to utilize an EIA-based process to “fully take into account” environmental sustainability in the design and implementation of its development programs. USAID Environmental Procedures represent the Agency’s unique implementation of the EIA process, and seek to assure that USAID-funded projects effectively identify and mitigate potential adverse environmental impacts. USAID Environmental Procedures also lay out an environmental compliance regime in which the Agency and Implementing Partners fulfill various environment-related requirements over the life of project.

Specifically, USAID Environmental Procedures dictate a process that must be applied to all activities **before** implementation. The output of this EIA process, defined by 22CFR216 (“Reg. 216”), is USAID-approved Reg. 216 environmental compliance documentation. This documentation includes:

- Requests for Categorical Exclusion (RCE)
- Initial Environmental Examinations (IEEs)—the USAID version of a preliminary assessment
- Environmental Assessments (EAs) and Programmatic Environmental Assessments (PEAs)

Most IEEs and all EAs/PEAs specify environmental management conditions, which are essentially mitigative measures. These measures—“IEE/EA conditions”—must be implemented and monitored over the life of the activity (or life of project, LOP). While implementation is the responsibility of the IP, USAID C/AORs are required to actively manage and monitor compliance with IEE/EA conditions. This process is the cornerstone of project environmental compliance. This session will introduce — *but not go into detail regarding*—the steps comprising this process and who is responsible for them: MEOs, CORs/AORs, Activity Managers, IPs, etc.

Although the pre-implementation, or “upstream compliance” aspect of USAID Environmental Procedures is well articulated via Reg. 216, specific requirements for the implementation of IEE/EA conditions and associated reporting—“downstream compliance”—are based primarily on Agency best practice, and vary somewhat by region. To strengthen downstream environmental compliance in Africa, IEEs and award documents are increasingly requiring IPs to develop, submit and implement environmental mitigation and monitoring plans (EMMPs) for their projects. The EMMP is a systematic vehicle to implement IEE and EA conditions.

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. 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 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/AORs to REMEDY or HALT activities where IEE/EA conditions are not being implemented, or which are otherwise out of compliance.

Objectives

- Understand the legal mandate of USAID Environmental Procedures, including 22CFR216 (“Reg. 216”).
- Link application of the EIA-based Environmental Procedures to the goals of ESDM and broader USAID development efforts.
- Gain familiarity with the environmental compliance requirements established by USAID Environmental Procedures, including IEEs and related documentation.
- Illustrate how the USAID IEE and related environmental compliance documents determine project environmental management requirements.

Key resource

- The *Environmental Procedures Briefing for Mission Staff* is a succinct summary of LOP environmental compliance. This training draws heavily from the *Briefing*. It is included in this Sourcebook and available at www.encapafrika.org/meoEntry.htm.

EIA and USAID Environmental Procedures: the Initial Environmental Examination and Beyond

GEMS Environmental Compliance-ESDM Training Series
USAID/Malawi • March 2013

Session Objectives:

- Review background and principles of Environmental Impact Assessment (EIA)
- Review EIA process and fundamental skills:
 - *Baseline characterization*
 - *Identifying impacts of concern*
 - *Developing a mitigation strategy*
- Explain USAID implementation of the EIA process
- Understand preparation of USAID environmental compliance documentation

2

USAID Environmental Procedures

- Specifies an Agency-wide approach to environmental management of USAID-funded activities.
- “Environmental Procedures” Encompass:
 - 22 CFR 216 (“Reg. 216”)
 - Foreign Assistance Act (FAA) Sections 117, 118 & 119.
 - USAID-internal Automated Directives System (ADS)
 - Regional Best Practices

! “USAID Environmental Procedures” refers generally to all relevant laws, Agency guidance, and prevailing best practices.

3

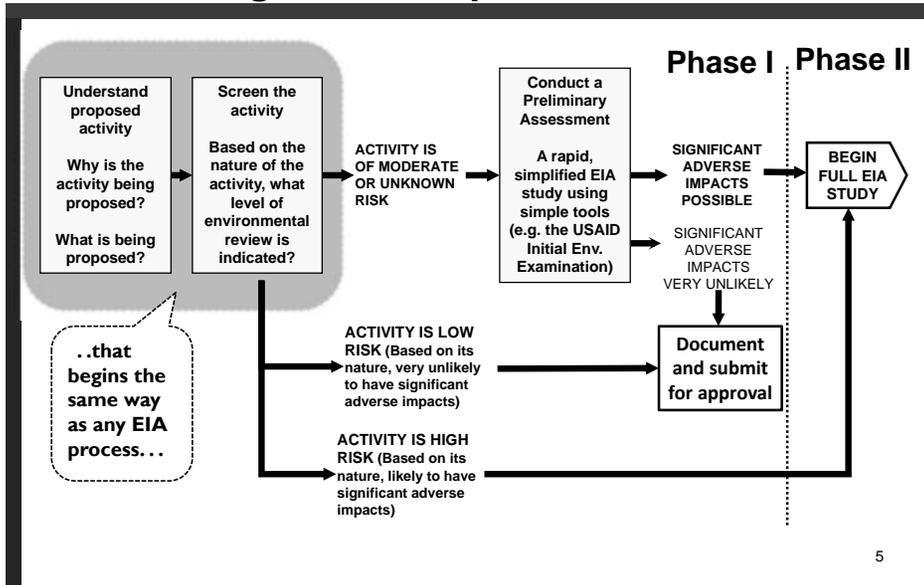
Applying the EIA process

- The USAID approach to EIA is established in Reg. 216
- Reg. 216 defines a pre-implementation EIA process
- This process applies to:
 - *All USAID programs or activities, (including non-project assistance.)*
 - *New activities*
 - *Substantive amendments or extensions to ongoing activities*

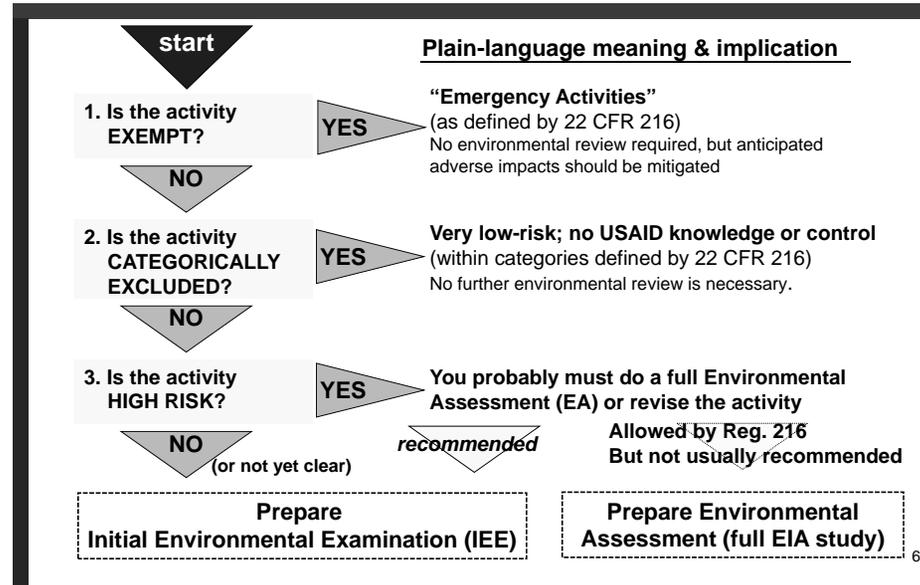
! Reg. 216 (22 CFR 216) is a US FEDERAL REGULATION. Compliance is mandatory.

4

Reg. 216 = USAID's implementation of general EIA process. . .

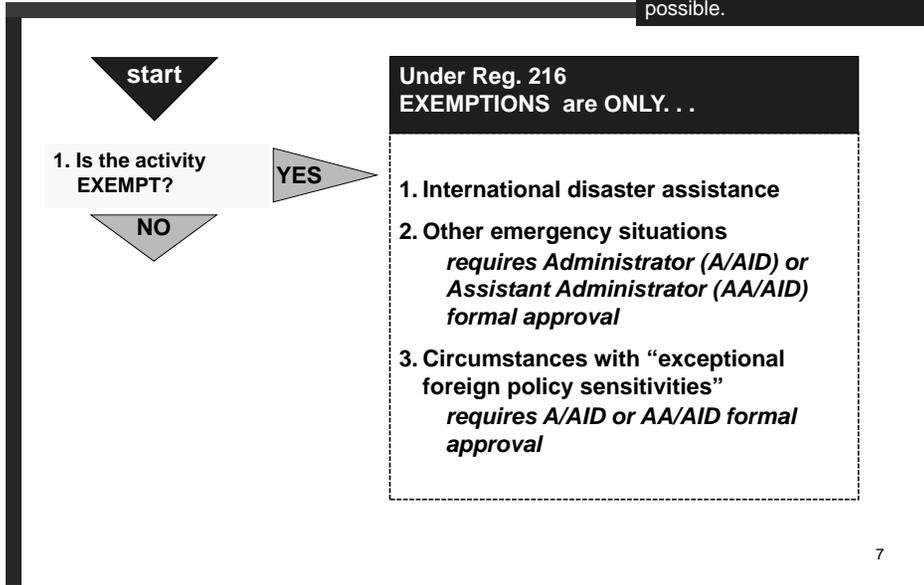


The USAID screening process

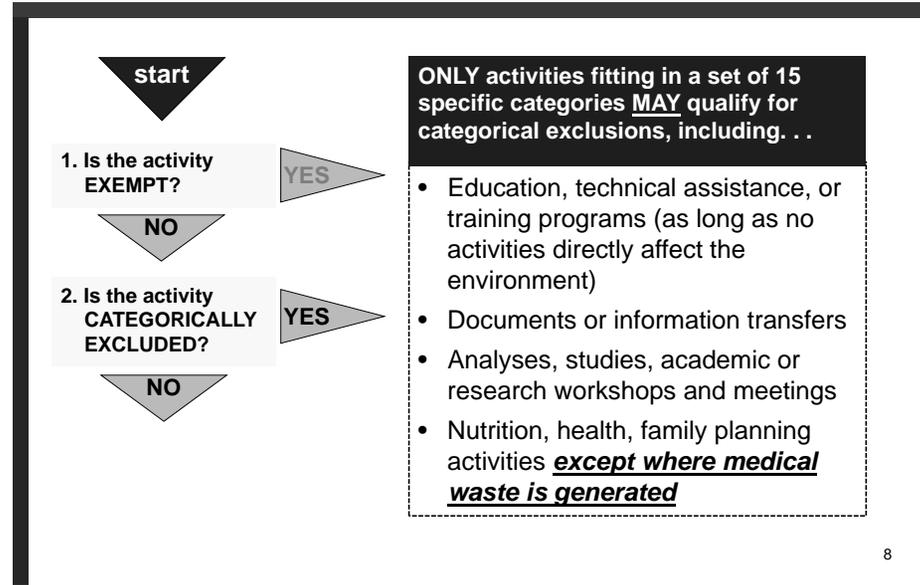


Screening under 22 CFR 216: Exemptions

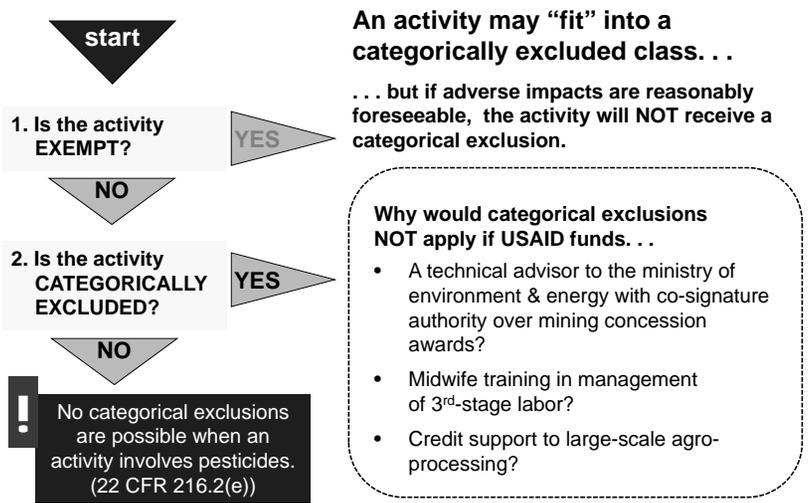
! "Exempt" activities often have significant adverse impacts. Mitigate these impacts where possible.



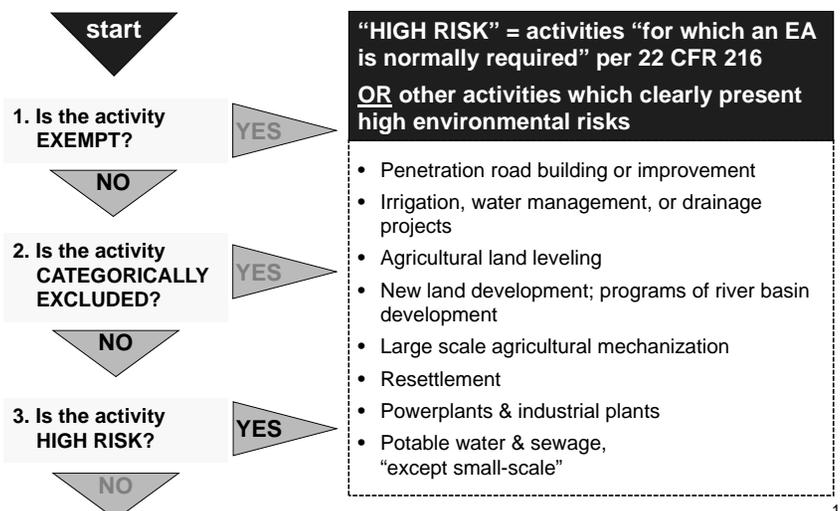
Screening under 22 CFR 216: Categorical Exclusions



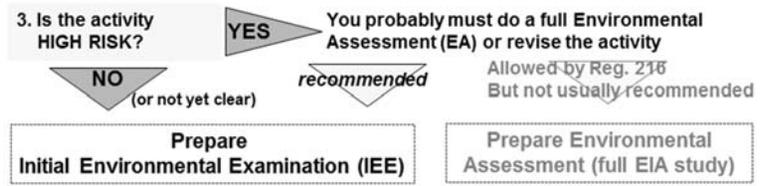
Categorical Exclusions: LIMITATIONS



“High Risk” (EA Likely Required)



What if my activity is “high risk”?



Can proceed directly to an EA (USAID’s full EIA study)

But unless the activity is VERY clearly “high risk”, do an IEE (USAID’s preliminary assessment) instead

WHY a preliminary assessment?

An IEE will:

- Allow you to determine if impacts can be easily controlled below a significant level—if so, an EA is not necessary
- Gather information needed to jump-start the EA process

What is clearly “high risk”?

| EA DEFINITELY REQUIRED | NOT CLEAR—proceed to IEE |
|--|--|
| New 500Ha irrigation scheme | Rehabilitation of 50Ha irrigation scheme |
| Major expansion of a 100MW thermal power plant & construction of new transmission lines | Mini-hydro installations of 500 kw total |
| Widening 30km of a 2-lane road to 6-lane tollway thru an urban area | Rehabilitation of multiple short segments of rural feeder road |
| Sections 118 & 119 of the Foreign Assistance Act REQUIRE an EA for . | |
| Activities involving procurement or use of logging equipment | |
| Activities with the potential to significantly degrade national parks or similar protected areas or introduce exotic plants or animals into such areas | |

Once each activity has been screened...

| Activity* | Exempt | CatEx | IEE Req'd | EA Req'd |
|---|--------|-------|-----------|----------|
| 1. Small clinic rehabilitation | | | X | |
| 2. Borehole Installations | | | X | |
| 3. Training in patient record-keeping | | X | | |
| 4. Construct provincial medical waste disposal facility | | | | X |

*Use a table like this. It helps.

13

Develop your 22 CFR 216 documentation. . .

. . .as determined by the outcome of your screening process

| Overall screening results | 22 CFR 216 documentation required |
|---|--|
| All activities are exempt | Statement of Justification |
| All activities categorically excluded | Categorical Exclusion Request + FACESHEET |
| All activities require an IEE | IEE covering all activities + FACESHEET |
| Some activities are categorically excluded, some require an IEE | An IEE that: <ul style="list-style-type: none"> Covers activities for which an IEE is required AND Justifies the categorical exclusions + FACESHEET |
| High-risk activities | <ul style="list-style-type: none"> Initiate scoping and preparation of an EA |



CATEGORICAL EXCLUSION REQUEST
Very simple; 1-2 pages. Describes the activities. Cites 22 CFR 216 to justify the catex.

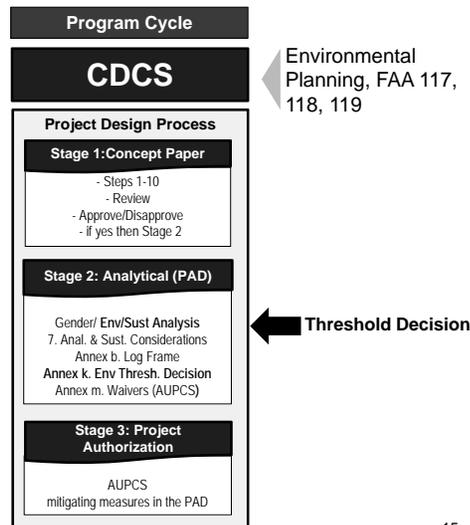


Initial Environmental Examination (USAID's preliminary assessment)

14

Timing of 22 CFR 216 documentation. . .

USAID's project design process requires approved Reg. 216 documentation as annex to the Project Appraisal Document



15

The IEE: USAID's preliminary assessment

Basic IEE outline

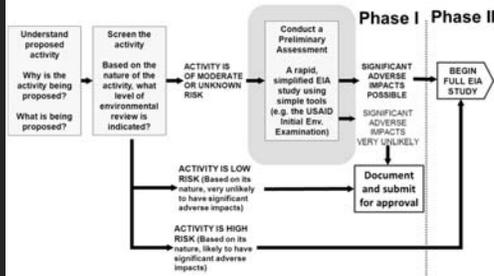
- 1. Background & Activity Description**
 - Purpose & Scope of IEE
 - Background
 - Description of activities
- 2. Country & Environmental information**
 - Locations affected
 - National environmental policies and procedures
- 3. Evaluation of potential environmental impacts**
- 4. Recommended threshold decisions and mitigation actions**
 - Recommended threshold decisions and conditions
 - Mitigation, monitoring & evaluation

! What does it look like?

The IEE is very similar to preliminary assessments required by other donors and governments.

16

Purpose of IEE



Provides documentation and analysis that:

- Allows the preparer to determine whether or not significant adverse impacts are likely
- Allows the reviewer to agree or disagree with the preparer's determinations
- Sets out mitigation and monitoring for adverse impacts

17

What determinations result from an IEE?

For each activity addressed, the IEE makes one of 4 recommendations regarding its possible impacts:

| If the IEE analysis finds... | The IEE recommends a... | Implications (if IEE is approved) |
|---|---|--|
| No significant adverse environmental impacts | NEGATIVE DETERMINATION | No conditions. Go ahead. |
| With specified mitigation and monitoring, no significant environmental impacts | NEGATIVE DETERMINATION WITH CONDITIONS | Specified mitigation and monitoring must be implemented |
| Significant adverse environmental impacts are possible | POSITIVE DETERMINATION | Do full EA or redesign activity. Conditions imposed by the EA must be implemented. |
| Not enough information to evaluate impacts | DEFERRAL | You cannot implement the activity until the IEE is amended |
| PLUS, the IEE will address any CATEGORICAL EXCLUSIONS carried over from the screening process. | | |

18

Reg. 216 documentation & approval

IMPORTANCE:

No activities may be implemented without APPROVED Reg. 216 environmental documentation in hand.

APPROVED = Mission Director (or Washington equivalent) & Bureau Environmental Officer (BEO) signatures

BEO concurrence *not* automatic or guaranteed

Dialogue is sometimes required

Who signs?

Clearances:

- COR/AOR or Team leader
- Mission Environmental Officer (for Missions)
- Regional Environmental Advisor (depending on mission)
- Mission Director or Washington equivalent*

Concurrence

- Bureau Environmental Officer*

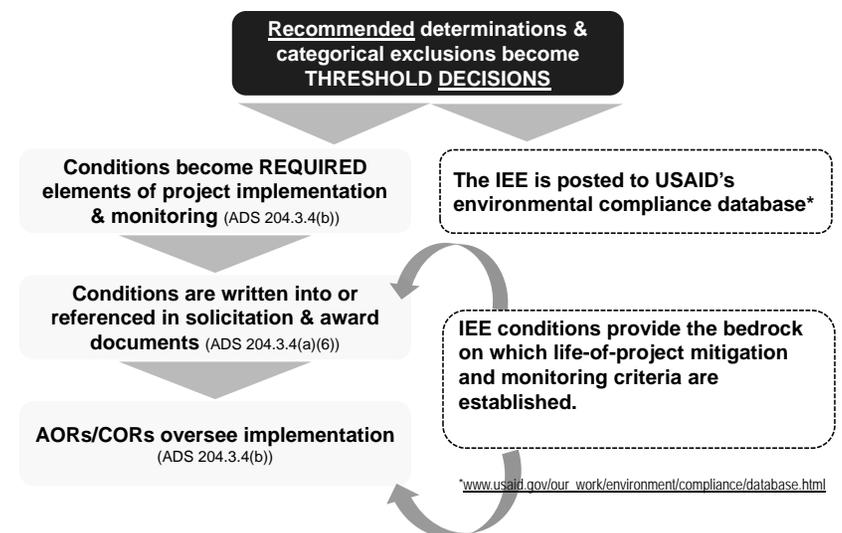
Approval

- General Counsel (rarely)

*required by Reg 216

19

When the IEE is duly approved. . .



20

What if I need to do an Environmental Assessment*?

- First step: a formal scoping process (22 CFR 216.3(a)(4))
- Scoping Statement must be approved by Mission Director, Bureau Environmental Officer.
- Informs the SOW for the Environmental Assessment itself.
- EAs are far more detailed than IEEs. They must address alternatives to the proposed activities. Public consultations are required.



**If a proposed action may affect the US environment or the global commons, an EIS is required, not an EA. (EIS = Environmental Impact Statement, per the US National Environmental Policy Act (NEPA)). This is RARE. (22 CFR 216.7.)*

21

What about host-country EIA procedures?

- Most host countries have domestic EIA requirements;
- USAID projects must also comply with these requirements;
- So, during screening, also screen against host country categories.
- If a host-country preliminary assessment or full EIA is required, the objective is to create **one document that satisfies both systems.**

Environment
al impact
assessment
reports

25. - (1)

Where the Director considers that sufficient information has been stated in the project brief under section 24, the Director shall require the developer, in writing, to conduct, in accordance with such guidelines as the minister may, by notice published in the *Gazette* prescribe, an environmental impact assessment and to submit to the Director, in respect of such assessment, an environmental impact assessment report giving -

- (a) a detailed description of the project and the activities to be undertaken to implement the project;
- (b) the description of the segment or segments of the environment likely to be affected by the project and the means for identifying, monitoring and assessing the environmental effects of the project;

22

Summary

- Reg. 216 establishes the pre-implementation USAID environmental review process
- This reflects the general EIA methodology
- It begins with a systematic screening and decision-making process with more detailed review, if needed
- USAID documentation and approval processes are clear and mandatory
- Reg. 216 documents define project environmental management criteria, most frequently as IEE conditions

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Session 7.

The Environmental Impact Assessment (EIA) Process in Malawi

Technical presentation and dialogue

Summary

The Environmental Impact Assessment (EIA) process is the basis for USAID Environmental Procedures and provides an internationally accepted methodology for identifying and understanding the potential impact(s) of a given activity or set of activities. The EIA process is also widely used to underpin national-level environmental policies and regulation, including the establishment of specific impact assessment criteria. While the principles of EIA are relatively portable, the particular implementation of EIA protocols by individual governments does vary. That is to say each national environmental authority may have its own unique 'take' on the EIA process. The result—to be expected—is a degree of difference in EIA requirements among the host countries in which USAID operates.

USAID Environmental Procedures stipulate that host country EIA regulations are met along with Reg. 216 and related Agency requirements. This can present Mission staff and partners with a confusing array of environmental management criteria. Although typically rooted in the same EIA process, these otherwise distinct protocols can quickly complicate the impact assessment process, particularly when it comes to necessary review and approval cycles. To the extent possible, USAID advocates—and actively supports—the fulfillment of USAID and host country environmental compliance requirements in concert. This means, for example, that the analysis and determinations included in a USAID project IEE might also be used to meet any host country requirements for preliminary assessment of a proposed activity. Similarly, when implementing an environmentally complex or high-risk project that requires an EA or PEA, it would be important to address host country regulation in the EA/PEA Scope of Work (SOW). In this manner a single detailed (and costly!) assessment is undertaken to meet to both USAID and host country requirements.

Within USAID, the Mission Environmental Officer (MEO) regularly serves as the primary reference for interpreting and, as necessary, incorporating national-level environmental policies and regulation in project design. The perceived transparency and practicality of host country EIA regulations can also vary significantly; some are easy to grasp and apply while others may seem vague and unenforceable. It is regardless vital that USAID and its partners be cognizant of host country environmental regulations and understand their relevance in a given scenario.

This session will provide an understanding of the EIA process in Malawi, including key differences and similarities with USAID Environmental Procedures. Following the technical presentation participants will have the opportunity to discuss specific aspects of complying with both USAID and Malawian environmental regulations.

Objective

Understand the nature and extent of national EIA regulations in Malawi and how they reflect or complement USAID Environmental Procedures. Discuss ways in which the project environmental review process can be maximized to meet multiple standards simultaneously. Identify particular challenges to navigating the EIA process in Malawi.

Sessions 8a + 8b.

IEE Critique

Small-group exercise

Summary

The Initial Environmental Examination (IEE) is used to assess the potential adverse impact(s) of virtually all USAID activities of moderate or unknown environmental risk. Even when dealing with patently high-risk activities such as penetration road building, resettlement, etc. the IEE is frequently used to better understand the scale of potential impacts and to frame an overall approach to the Environmental Assessment (EA) (as opposed to skipping the IEE in favor of the full EA). The IEE is therefore central to USAID's implementation of Reg. 216 and can 'make or break' the successful integration of environmentally sound design and management.

Like any assessment that relies on technical expertise, professional judgment and cohesive writing, not all IEEs are created equal: some are better than others. An important skill of USAID staff and partners charged with environmental compliance/ESDM-related duties is understanding where and how an IEE may be lacking in (1) its analysis and characterization of the proposed activity/activities and potential adverse impacts, and (2) articulation of a recommended determination and any associated conditions. A good IEE does not need to be long or overly rigorous, but it should be clear and accurate, presenting a realistic picture of the issues at play with reasonable conclusions on overall risk and any mitigating actions.

This session will provide an opportunity for participants to review and discuss illustrative IEE excerpts that reflect aspects of yesterday's Site Assessment Exercise (Session 5). While not drawn from *actual* IEEs, the excerpts will highlight typical attributes—positive and negative—for consideration in a small-group format. This critique will help participants understand how best to approach the process of reviewing and approving or applying an IEE in a real project context. Such critical review skills are strengthened by participants' first-hand field experience or knowledge of project activities (hence the preceding site assessment).

The first portion of this session (Session 8a) will be used to explain the exercise and methodology—this will take only a few minutes. The majority of our time will be used to review and discuss the IEE content in small-group format, with each group offering a brief report-out of its key observations/findings (Session 8b).

Objective

Develop critical IEE review skills; learn to identify common mistakes or weaknesses with regard to the analysis and characterization of proposed activities and potential adverse impacts, and the articulation of recommended determinations and associated conditions.

Sample IEE

“Getting Rid of Weeds” (GROW) Project

Project Description

The GROW project will work with smallholder farmers and farming cooperatives to enhance agricultural production in rural Malawi. The project will promote the use of agricultural inputs such as fertilizer and improved seed varieties; the project will also promote specific pest control efforts, emphasizing Integrated Pest Management (IPM), but leaving the door open for future use of synthetic pesticides (in accordance with USAID and Gov't of Malawi regulations). GROW also entails an irrigation development component, with funding for construction coming from rural credit institutions that USAID will support with technical and managerial capacity building efforts.

Baseline Environment

GROW will be implemented in some of Malawi's poorest regions. Traditional means of natural resource management (NRM) have stripped local soil and water resources of their most productive capacity, and the uptake of improved cultivation practices has generally failed to boost output and incomes. Generally water resources are scarce with significant re-use among target communities. Low rates of numeracy and literacy also present a significant barrier to the effective conveyance of enhanced agricultural techniques and effective loanmaking to the rural farming sector.

Assessment of Potential Adverse Impacts and Recommended Determinations

- The use of synthetic pesticides presents a range of potential adverse environmental impacts. In order to promote pesticide safer use, the project will solicit the opinions of rural farmers as to which products they are most comfortable using. This list will be compiled, formatted and submitted to meet the USAID PERSUAP requirement (Negative Determination with Conditions: no pesticide use until PERSUAP is prepared based solely on community preference and feedback).
- Support for rural credit institutions to increase ag. sector loanmaking has no environmental impact as the project will be providing training and technical assistance only and will not use this component to directly fund any agricultural interventions (Categorical Exclusion).
- Promotion of the use of fertilizers and other agricultural inputs requires effective training and technical assistance so that inputs are not mis-used in a manner that further degrades the land's productive capacity and negatively impacts local-level NRM (Negative Determination with Conditions: in order to benefit from this activity rural farmers must review a technical manual and pass a written exam assuring cognizance of potential adverse impacts and familiarity with best management practices [BMPs]).
- Given existing water scarcity, technical assistance with the design and construction of smallholder irrigation systems poses a strong likelihood of significant adverse environmental impacts (Positive Determination: implementation of smallholder irrigation schemes by GROW will require completion of Programmatic Environmental Assessment [PEA]).
- The introduction of improved seed varieties poses the potential adverse impact of developing into an invasive species (Negative Determination with Conditions: non-native seed varieties may not be introduced by GROW in areas proximate to protected areas or other sensitive habitats [e.g., wetlands, primary forest, etc.]).

Sample IEE

“Sending Waste Everywhere Except to People” (SWEEP) Project

Project Description

The SWEEP project will focus on cleaning up some of Malawi’s most persistent challenges in effective sanitation and waste management. SWEEP efforts will be implemented in Malawi’s peri-urban communities—communities that lack formal sanitation and waste management services and that are under increasing population and land-use pressures. SWEEP will prioritize clean-up and the introduction of sustainable waste management systems in primary schools and health clinics. This includes support for school-based sanitation systems and the creation of health care waste management protocols and the construction of medical waste incinerators at selected clinics.

Baseline Environment

Malawi’s peri-urban communities must support expanding populations, often housed in growing informal settlements, amidst a general lack of traditional municipal sanitation services (e.g., sewers and solid waste collection). The provision of basic health care services in these communities also generates an unmanageable stream of medical waste, much of which is infectious and presents a serious public health threat to providers, patients, and neighboring communities. Most households have very little income to commit to improved sanitation and waste management. Literacy is relatively high given access to educational opportunities and many residents’ employment in the formal sector, as well as professional and economic aspirations. Local schools and health clinics are relatively well staffed by qualified professionals, however there is fundamental lack of understanding and motivation in attempting to identify and implement sustainable waste management schemes, both among teachers and health care workers, as well as among residents.

Assessment of Potential Adverse Impacts and Recommended Determinations

- The introduction of specific waste re-use schemes prevents negligible threat of adverse impacts as the schemes will be designed with public health needs in mind and will establish protocols for the effective, safe management of these systems (Negative Determination).
- The establishment of health care waste protocols presents the risk of incomplete or inaccurate implementation by clinic staff, potentially exacerbating existing threats to public health (Negative Determination with Conditions: the establishment of health care waste protocols will be dependent on complete training and capacity building for clinic staff).
- The construction of medical waste incinerators at select clinics poses significant threat of adverse impact through inappropriate design, siting, operation and maintenance (Positive Determination: an Environmental Assessment must be completed prior to each incinerator construction).
- Community awareness-building and technical assistance in waste management will have only positive impacts on public health at the household and community level (Categorical Exclusion).
- The construction of latrines and other waste management structures present the risk of being poorly suited to local environmental conditions (e.g., soil type, rainfall, population density, etc.) (Negative Determination with Conditions: all waste management structures must be of sound quality and reflect local environmental conditions integrate best management practices).

Session 9.

Principles of Environmental Monitoring

Technical presentation and dialogue

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.

Objective

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

Key resource

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

Principles of Environmental Monitoring

GEMS Environmental Compliance-ESDM Training Series
USAID/Malawi • March 2013

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.

Core EIA Skills II. Visit www.encapafrika.org

2

Monitoring environmental conditions

1. Systematic observation of key environmental conditions

= Environmental conditions that:

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

❖ correspond to impacts & mitigation measures

❖ Upon which the project depends for its success

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

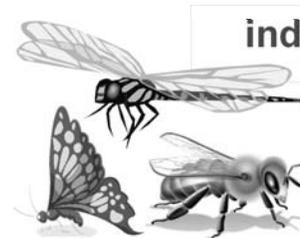
3

Core EIA Skills II. Visit www.encapafrika.org

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

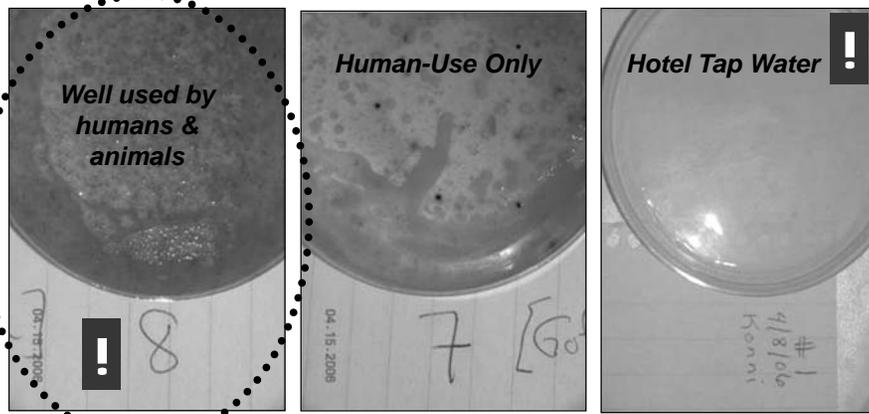
For example. . .

Core EIA Skills II. Visit www.encapafrika.org

4

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).

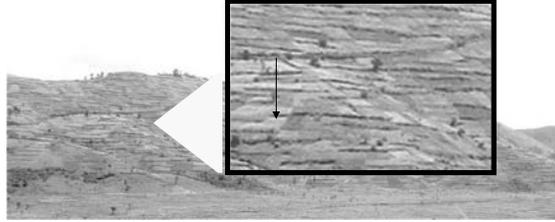
Surface sewage contamination



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 distinguish the impacts of the activity from other factors

This requires decisions about:

- 1 Location of measurement
 - 2 Timing & frequency of measurement
- and often . . .
- 3 Other factors

For example

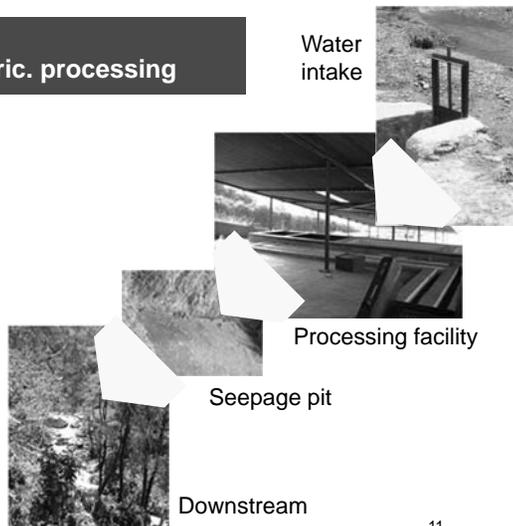
Assessing environmental indicators systematically

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."

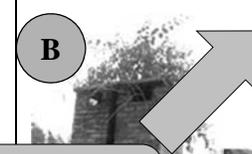
Desk assessment:
Clinics are asked to report:

Percentage of staff trained?
Spot inspections of waste disposal locations carried out?
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

Version: 4 December 2009
download at www.encapafrika.org/activities/visual-field-guides
comments and corrections to encapafrika@usaid.gov

PROBLEMS: A "YES" answer to any of the following indicates an environmental deficit in activity design or management. For USAID-funded activities, corrective action will be required. Notify the Chief of Party and the USAID Project Manager.

1. Is a tank or well supplying water for domestic use unsecured?
 - YES: Issue: Early results in contamination of water with pathogens. Can provide breeding habitat for disease vectors, including mosquitoes. (Photo depicts unsecured well.)
 - NO:
2. Is there stagnant water around the water supply point?
 - YES: Issue: May provide habitat for disease vectors and attract livestock (see below). There is a high likelihood that stagnant water around a shallow well will compromise water in the well.
 - NO:
3. Do livestock share the water supply point?
 - YES: Issue: Early results in contamination of water with livestock feces & body fluids. May attract disease vectors (particularly flies) which are transmitters of disease or contamination.
 - NO:
4. Is there soil erosion in the vicinity of the water supply point?
 - YES: Issue: Usually results in contamination of water with sediment from the supply point by undercutting the service pipes, well screens, and pump fittings. Other leads to stagnant water around the supply point (see question 2, above).
 - NO:

10/09/11

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

Session 10.

The Environmental Mitigation and Monitoring Plan (EMMP)

Technical presentation and dialogue

Summary

Environmental Mitigation and Monitoring Plans (EMMPs) provide a framework for specifying and organizing mitigation and monitoring, and assuring that it responds systematically to IEE/EA conditions. In its most basic form, the EMMP is 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; and
- Who is responsible for both mitigation and 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.

Note that EMMPs are also known as EMPs (Environmental Management Plans), EMPRs (Environmental Mitigation Plan and Report), and similar acronyms.

EMMP is the most widely used term. EMMP formats likewise vary. IEEs or awards sometimes specify an EMMP format, but more often the IP has flexibility in designing/adopting/adapting a format that meets the needs of the particular project. The formats discussed in this training are the most common and are acceptable in most contexts.

USAID Environmental Procedures require that environmental mitigation required by IEEs and EAs is implemented and monitored, but do not require EMMPs *per se*. However, most new IEEs do require that EMMPs be developed and implemented. This requirement can be operationalized either as technical direction from the COR/AOR, 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 worldwide 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.

Environmental Compliance Language (ECL)

For new awards and significant modifications to existing awards, USAID 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 BEOs and REAs strongly encourage its use.

EMMP Submission and Approval

EMMPs should be approved by the COR/AOR; sometimes there is additional review by the MEO or REA. COR/AORs should require that EMMPs are submitted together with the project’s workplan or PMP.

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

Objectives

- Brief the EMMP concept.
- Establish that EMMPs are critical to effective and systematic implementation of IEE/EA conditions.
- Explain the mechanisms by which USAID is requiring IPs to develop and implement EMMPs.

Key resources

- Simple EMMP template (see following)
- EMMP Template with Monitoring Log and Budget (see following)
- EMMP Factsheet (included as annex)
- Environmental Compliance: Language for Use in Solicitation and Awards (ADS 204 Help Document) (included as annex)

Basic EMMP Template

(To use, fill in text in **green highlight**. Delete explanatory comments in **yellow highlight**.)

EMMP for Project **XXX**

Person Responsible for Overseeing EMMP:

[name, contact information]

| Activity 1: [name of activity] [briefly describe activity & summarize potential adverse environmental impacts—from IEE] | | | |
|--|--|---|--|
| IEE or EA Condition <small>(reproduced from the IEE or EA)</small> | Mitigation <small>Specific actions to be taken to comply with the condition. (if an IEE or EA condition is already specific to the project/ activity and implementation actions self-evident, this “translation step” can be omitted)</small> | Monitoring <small>How will the project verify that the mitigation action is being implemented and is both effective and sufficient?</small> | Timing and Responsible Parties <small>Who is responsible for mitigation, monitoring, reporting? Timing/frequency of these actions</small> |
| | <small>A single IEE/EA condition may require multiple action to implement—add rows as necessary</small> | | |
| | | | |

[add rows for additional conditions]

[repeat table for additional activities]

EMMP Template with Monitoring Log and Budgeting Information

(To use, fill in text in **green highlight**. Delete explanatory comments in **yellow highlight**.)

EMMP for Project **XXX**

Person Responsible for Overseeing EMMP:

[name, contact information]

| Activity I: [name of activity] | | | | | | | | | |
|--|---|---|--|--|----------------|------|--------|-----------|--|
| [briefly describe activity & summarize potential adverse environmental impacts—from IEE] | | | | | | | | | |
| IEE/EA Condition | Specific Mitigation Measures | How monitored | Timing & Responsible Parties | Estimated Costs | Monitoring Log | | | | |
| | | | | | | Date | Result | Follow-up | |
| (reproduced from the IEE or EA) | Specific action to be taken to comply with the condition. (if an IEE or EA condition is already specific to the project/ activity and implementation actions self-evident, this “translation step” can be omitted) | How will the project verify that the mitigation action is being implemented and is both effective and sufficient? | Who is responsible for mitigation, monitoring, reporting? Timing/frequency of these actions | Estimated costs of mitigation and monitoring, or budget notes that allow such an estimate to be made. Pass on to the project budgeting team. | 1 | | | | |
| | | | | | 2 | | | | |
| | | | | | 3 | | | | |
| | | | | | 4 | | | | |
| | A single IEE/EA condition may require multiple mitigation actions to implement—add rows as necessary | | | | | 1 | | | |
| | | | | | | 2 | | | |
| | | | | | | 3 | | | |
| | | | | | | 1 | | | |
| | | | | | | 2 | | | |
| | | | | | | 3 | | | |

[add rows for additional conditions]

[repeat table for additional activities]

The Environmental Mitigation & Monitoring Plan (EMMP)

GEMS Environmental Compliance-ESDM Training Series
USAID/Malawi • March 2013

Session Objectives

- Understand the USAID requirement for ongoing mitigation and monitoring of environmental impacts
- Learn how to “operationalize” IEE and EA conditions as part of project implementation
- Discuss adapting IEE/EA conditions in response to specific field activities and environments
- Review format and preparation of the Environmental Mitigation and Monitoring Plan (EMMP) via case study

2

Congratulations...

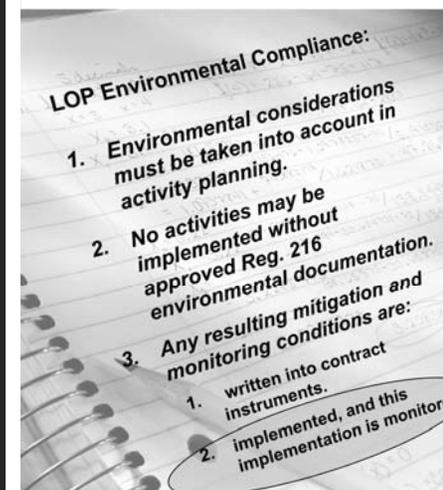
✓ **We are all experts in EIA and USAID Environmental Procedures!**

❖ **Now, we must apply our knowledge of impact assessment and mitigation in a real project setting**

- *IEEs (and EAs) are useless unless the conditions—environmental management criteria—they establish are implemented!*
- **USAID Environmental Procedures therefore require implementation**

3

USAID requirements are specific



USAID is required to implement and monitor IEE/EA conditions.

What does the ADS say?

Team Leaders and Activity Managers or COR/AORs 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)

4

Implementation of IEE/EA conditions

Practically, implementation & monitoring of mit. & mon. conditions requires that:

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

EMMPs are critical.
What are they?

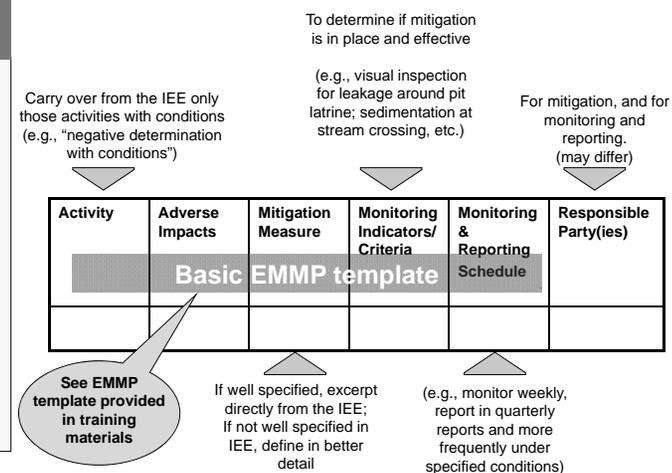
*Except Title II partners, who write their own IEEs.

5

The EMMP: a simple tool

An EMMP sets out:

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



6

The EMMP: a flexible tool

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 or monitoring results are recorded
3. Other Suggestions?

We will review an EMMP format with these features

7

An effective EMMP is specific + realistic

❖ The EMMP must specify practical mitigation measures

❖ The EMMP often "translates" IEE conditions that are written in very general terms

❖ Implementing these conditions requires first translating them into specific mitigation actions

How do we do this?

For example, WASH-related IEE conditions might state:

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

Or even more generally:

"wells shall be sited consistent with good practices."



8

EMMPs build on standards & best practice

Determining specific mitigation actions starts with review of appropriate standards or best practice guidance

For our well example:

- ❖ Identify and adopt siting criteria from relevant resources
- ❖ The specific mitigation action/measure in the EMMP is:
 - “Compliance with project well-siting criteria”
 - Attach siting criteria to EMMP; make checklist for use by field teams and Monitoring & Evaluation (M&E) staff

Host country standards



Sphere standards



Small-Scale Guidelines

ETC.

9

Best practice guidance: well siting criteria



MINIMUM distances from potential sources of contamination for well siting:

- ❖ 45m 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 another example:

10

Health services capacity & policy



IEE stipulates that:

“Capacity building and policy development support to public health delivery and 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.”

To “translate” these IEE conditions, the EMMP will need to:

- identify an appropriate waste management standard; *and*
- specify what is realistic, given that the project will not have direct control over these systems

11

How are EMMPs being required?

Three mechanisms:

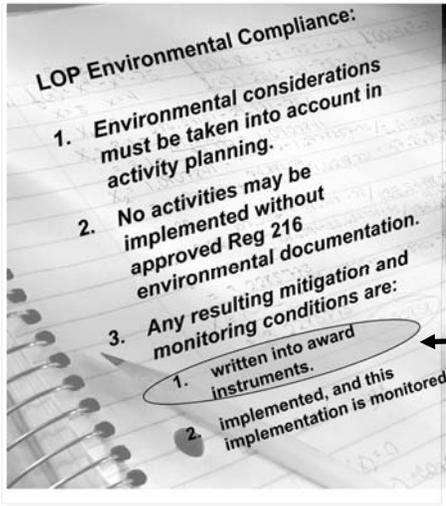
1. Technical direction from COR or AOR
2. Required by contract/agreement
3. Required by MYAP guidance (Title II only)

More about this...

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

12

USAID requirements are specific: Part II



USAID is required to write IEE/EA conditions into awards.

What does the ADS say?

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)

13

Current best practice exceeds requirement

USAID is increasingly using **best-practice environmental compliance language** that goes 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

And new solicitations require that

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

◀ *To assure that projects do not “creep” out of compliance as activities are modified and added to over their life*

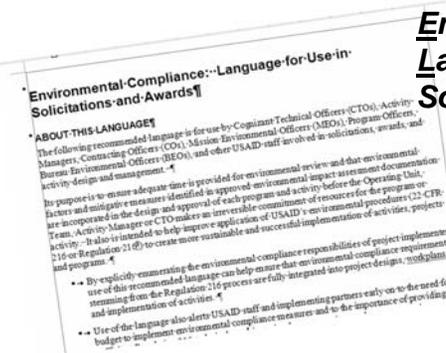
Specifically:

1. Complete EMMP exists/is developed
2. Workplans and budgets integrate the EMMP
3. Project reporting tracks EMMP implementation

14

Source of best-practice language

(almost) new



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 is strongly encouraged

Hardcopy in your training materials.

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

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ECL promotes compliance + ESDM, and ...

Benefits both Mission Staff & partners:

USAID Mission Staff

Assures that environmental monitoring and reporting is integrated into routine activity monitoring and reporting; reduces the cost and effort of USAID verification/oversight.

Avoids the effort, costs and loss of good will that come from imposing “corrective compliance” measures after implementation has started.

Implementing Partners

Provides clarity regarding environmental compliance responsibilities

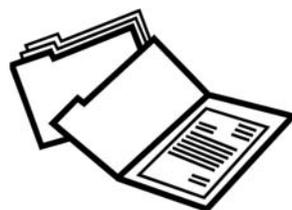
Prevents “unfunded mandates”—requirements to implement mitigation and monitoring after activity has commenced and without additional budget.

! 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.

16

How are EMMPs approved?

- ❖ EMMP must be approved by the project COR or AOR
- ❖ EMMP is usually submitted and approved with the project workplan or PMP
- ❖ EMMP may also be submitted with the project IEE (typical for Title II partner MYAP IEEs)
- ❖ Sometimes additional review by the MEO or REA



17

EMMP example: Irrigation Rehabilitation

PROJECT BRIEFING:

System reconstructed in 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

Other dam is made of stone and soil

Water source is low in salts; risk of soil salinization is minimal



18

EMMP example: Irrigation Rehabilitation

PROJECT BRIEFING:

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

At 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 wildlife habitat



19

EMMP example: Irrigation Rehabilitation

PROJECT BRIEFING:

Canals are hand made and carry open water from upstream

Roads are in poor condition—difficult to get crops out

System maintenance committee is not functional

Allocation: land registration to receive irrigation water was done in early 1980s; 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

20

EMMP example: Irrigation Rehabilitation

Excerpt of Impacts/Baseline Issues and Mitigations

| Sub-activity or component | Description of Adverse 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 |

21

And finally. . .the EMMP itself



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

22

EMMP example: Irrigation Rehabilitation

Excerpt of EMMP and Monitoring Log

| 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 | <ul style="list-style-type: none"> * # 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 | <ul style="list-style-type: none"> # 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 | <ul style="list-style-type: none"> *% of primary canals lined with concrete. *# of additional hectares irrigated | Reports Field visit Comparison with baseline information | Quarterly | | | | |

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Session 11.

Introduction to the *Environmental Guidelines for Small-Scale Activities in Africa (EGSSAA)*

Brief presentation + demonstration

Summary

This session will familiarize participants with the ESDM and environmental compliance resources available through various USAID project Web sites. This includes the legacy ENCAP project Web site, as well as the GEMS project Web site. The vast majority of technical resources currently available at www.encapafrica.org will be carried over to the full GEMS Web site, which is currently at the final review stage within USAID and is anticipated to 'go live' in the coming weeks. Until the GEMS site is fully operational, the ENCAP site remains USAID's best resource for environmental compliance/ESDM support materials.

These resources include:

- The *Environmental Guidelines for Small-Scale Activities in Africa (EGSSAA)*, or "Small-scale guidelines"
- Visual Field Guides (VFGs)
- Training Materials
- MEO Resource Center
- Other sector-specific resources

The session also summarizes the environmental compliance and ESDM support services available to Missions and implementing partners via USAID's GEMS program.

Objective

Review the key ESDM/environmental compliance resources introduced during the workshop.

Key Resources

- As referenced above
- GEMS Factsheet (see following)



IMPLEMENTING MECHANISM FACTSHEET

GLOBAL ENVIRONMENTAL MANAGEMENT SUPPORT (GEMS)

CONTENTS

1. GEMS Overview
2. Implementers
3. Period of Performance
4. Scope of Services
5. Accessing GEMS Services
6. Pricing
7. Award Details
8. Contacts

1. GEMS OVERVIEW

GEMS is a global program implemented under a USAID Africa Bureau contract which provides on-demand environmental compliance, management, and sound design support to USAID's Environmental Officers, individual agency operating units and their projects and programs.

The Africa Bureau developed GEMS collaboratively with other USAID bureaus, and the program was therefore made global in scope. Subject to available ceiling, GEMS services are available to any bureau or operating unit that elects to incrementally fund the contract.

GEMS effectively replaces certain USAID environmental compliance support programs, such as the Africa Bureau's long-running ENCAP project, the Asia/Middle East Bureau's EMCB project, and the Global Health Bureau's EMCAB project.

2. IMPLEMENTERS

GEMS was awarded in late September 2011 to **The Cadmus Group, Inc.** under the GSA Multiple Award Schedules (MAS) program.

The core team includes principal partners Cadmus (prime contractor) and Sun Mountain International, who together provide the primary environmental compliance/environmentally sound design and management expertise. Other core team members are DAI, World Education, Inc. and Eurasia Environmental

Associates, LLC.

A number of on-call local partners may be engaged depending on the location of programmed activities.

3. PERIOD OF PERFORMANCE

GEMS is authorized for a 1-year base period beginning late September 2011, with an option to renew for a second year. The program cannot be extended beyond end September 2013.

4. SCOPE OF SERVICES

A broad range of environmental compliance, management, and sound design support services are available under GEMS, including but not limited to:

- A. TRAINING.** Planning, design and delivery of general and sector-specific training in environmental compliance and environmentally sound design and management; development of training curricula and materials; and development and delivery of online/distance learning on these topics.
- B. GUIDANCE, TOOLS AND SYSTEMS.** Development and review of environmental compliance/best practice guidance for individual projects or sector programs. Development of software/IT and other tools and systems to support environmental compliance, management and M&E from mission portfolio to project level.
- C. 22 CFR 216 DOCUMENTATION.** Development and review of documentation prepared under USAID Environmental Procedures (22 CFR 216), including Initial Environmental Examinations (IEEs), scoping statements, and Environmental Assessments (EAs) and Programmatic Environmental Assessments (PEAs), including health, gender and social impacts analyses.
- D. EMMPs/EMPRs.** Development and review of Environmental Mitigation and Monitoring Plans (EMMPs) and Environmental Mitigation Plans and

Reports (EMPRs) and TA to support to field implementation of such plans.

E. COMPLIANCE ASSESSMENTS, FIELD MONITORING AND EVALUATION.

Environmental compliance assessments, from mission portfolio to project and site-level. Field monitoring and evaluation of environmental compliance/management.

F. ENVIRONMENTAL MANAGEMENT IN DISASTER ASSISTANCE. Support to environmental management of disaster assistance, including rapid environmental assessments (REAs).

G. BEO, REA AND MEO SUPPORT & BACKSTOPPING. Screening and quality control of submitted 22 CFR 216 documentation and advice/TA for IPs and USAID staff developing this documentation.

H. OTHER ENVIRONMENTAL ANALYSES. Scoping, development and review of FAA 118/119 analyses, climate vulnerability assessments, health and social impact assessments, among others.

I. HOST COUNTRY ENVIRONMENTAL MANAGEMENT CAPACITY. Capacity-building of host country environmental management systems and professionals.

J. KNOWLEDGE MANAGEMENT, LEARNING & COMMUNICATIONS. Web-based and hardcopy dissemination of environmental management guidance, strategic and high-impact environmental communications, environmental management community-of-practice development and support.

5. ACCESSING GEMS SERVICES

Bureau Environmental Officers (BEOs) from participating Bureaus serve as Activity Managers for GEMS activities within their region/sector. In this capacity, they are “gatekeepers” for the GEMS work plan, in consultation with the COTR.

Operating units interested in accessing GEMS services, whether funded by the participating Bureaus or with their own buy-in funds, should first contact the relevant BEO/Activity Manager. See contact list at right.

The Activity Manager will work with the requesting operating unit and the prime contractor to reach an agreed scope of work, staffing, scheduling and budget.

6. PRICING

The GEMS award establishes fixed prices for a set of common training and environmental review tasks

(exclusive of travel and logistics costs). For other tasks, it establishes fixed time and materials (T&M) rates for different categories of expertise. These price schedules are available from the COTR and Activity Managers.

7. AWARD & GLAAS DETAILS

| | |
|-----------------------|---|
| Award # | AID-OAA-M-11-00021 |
| Issued under | GSA Multiple Award Schedule (Cadmus GSA Multiple Award Schedule Contract No.: GS-10F-0105J) |
| Period of Performance | 22 Sept 2011–21 Sept 2012 base yr 22 Sept 2012–21 Sept 2013 ext year |
| Ceiling | \$7.7mn base year; \$7.9mn extension year |
| Lead Requisition | REQM-AFR-13-000004 |
| Group Requisition | RGP-AFR-13-000004 |

8. CONTACTS

| | |
|------------------------|---|
| Contract Officer | Patrick Mudd, OAA pmudd@usaid.gov |
| Contracting Specialist | Jimmie Curtis, OAA jcurtis@usaid.gov |

| | |
|------------|--|
| COR | Brian Hirsch, AFR bhirsch@usaid.gov |
| Deputy COR | Teresa Bernhard tbernhard@usaid.gov |

| | |
|--|--|
| Bureau Activity Managers (Bureau Environmental Officers) | |
| AFR | Brian Hirsch bhirsch@usaid.gov |
| Asia/Middle East | Robert MacLeod rmacleod@usaid.gov |
| LAC | Victor Bullen vbullen@usaid.gov |
| DCHA | Erika Clesceri eclesceri@usaid.gov |
| E3 | Teresa Bernhard tbernhard@usaid.gov |
| GH | Teresa Bernhard tbernhard@usaid.gov |

| | |
|---------------------------|---|
| Implementer Key Personnel | Mark Stoughton, Team Leader The Cadmus Group, Inc. Mark.Stoughton@cadmusgroup.com |
| | Scott Solberg Environmental Management and Training Specialist Sun Mountain International ssolberg@smtn.org |
| | Wes Fisher, EIA Specialist The Cadmus Group, Inc. Weston.Fisher@cadmusgroup.com |

Session 13.

Environmental Compliance Reporting

Technical presentation and dialogue

Summary

CORs and AORs are required by ADS 204 to monitor and evaluate on an ongoing basis whether the environmental mitigation required by the governing IEE(s)/EA is being implemented and is effective.

In other words, COR and AOR oversight responsibilities extend to environmental compliance, just as they do to other elements of project implementation. Practically, this requires that IPs not only systematically comply with IEE/EA conditions by developing and implementing EMMPs, but that they *report* to USAID on this implementation.

Regional best practice for IP environmental compliance reporting consists of two elements:

1. Project reporting should provide an auditable record of environmental compliance.

Generally, IPs' quarterly or semi-annual 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.

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 larger projects, or those 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.

2. One or more key project performance indicator(s)—“project results framework”—should reflect overall environmental soundness/environmental compliance.

In other words, the most critical elements of environmental soundness/compliance should be integrated, or “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 six (6) months” rather than simply “number of water points established.”
- *In a road rehabilitation project*, the IP might use the indicator “km of road rehabilitated under environmentally sound practices” rather than simply “km of road rehabilitated.”

In both cases, the “environmentalized indicator” demonstrates that core project activities are being executed with attention to environmental soundness/compliance. However, it is NOT expected or appropriate to “environmentalize” every key indicator, or to capture every mitigation measure.

(This best practice applies to new awards; where EMMPs are developed *after* the PMP is established, it may not be possible to change key performance indicators.)

Missions should not rely on IP progress reports alone to track environmental compliance. Field visits at minimum should include a quick check for significant environmental design/management problems (for certain activities, the ENCAP Visual Field Guides [VFGs] may be used). For environmentally complex activities, specific field visits should be made to verify EMMP implementation.

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

| Project stage | Implementing Partner | USAID |
|---------------------------------------|--|--|
| Workplan & PMP Development | Develops EMMP Integrates EMMP into budget and workplan Determines environmental compliance reporting | Review and approval of: <ol style="list-style-type: none"> 1. the EMMP (for responsiveness to IEE/EA conditions and 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. |
| 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 should integrate a quick check for significant environmental design/management problems. For environmentally sensitive activities, specific visits should be made to verify EMMP implementation. |

Objectives

Achieve a common understanding of the two basic elements of IP 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.

Environmental Compliance Reporting

GEMS Environmental Compliance-ESDM Training Series
USAID/Malawi • March 2013

Session Objectives:

- Understand USAID criteria for environmental compliance reporting
- Review role of EMMP in the reporting process
- Discuss “mainstreaming” of project environmental performance for reporting purposes
- Learn how to “environmentalize” key project indicators

2

The EMMP is in place ... now what?



Now that EMMP is being implemented, **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/ environmental compliance.*

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)

Let's look at #1 first:

3

Preparing “an auditable record” of compliance

Environmental compliance reporting can be integrated as part of ‘regular’ project reporting

❖ Quarterly or semi-annual project reports should contain a separate section addressing environmental compliance.

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

Any specific reporting requirements contained in the IEE must also be addressed

Title II CSs must submit an Annual Environmental Compliance Status Report

4

Use EMMP to streamline reporting

If the EMMP contains a “monitoring record” section, attach the EMMP—updated with current monitoring results—to the report.

| Design requirement | Incorporated in final technical specifications | | Built-as specified? (confirmed by field inspec.) | | | Notes (Issues & resolution) |
|---|--|----------|--|--------------------|----------|-----------------------------|
| | Date Confirmed | Initials | Y/N | Date of inspection | Initials | |
| 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.

5

EMMP monitoring log can simplify reporting

If the EMMP contains a “monitoring record” section, simply attach the EMMP to the quarterly or semi-annual reporting document.

| 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 | <ul style="list-style-type: none"> # 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 | <ul style="list-style-type: none"> Reports Field visit | Quarterly | | | | |
| 4. Protect upper slope with fruit (mangoes, citrus, avocado) and forest trees | Project agricultural technician | <ul style="list-style-type: none"> # of trees planted and survived % of at-risk upper slope land protected total m³ of sediment removed from canals over each rainy season. | <ul style="list-style-type: none"> Reports Field visit Comparison with baseline information | Quarterly /Annual | | | | |

The irrigation rehabilitation EMMP from the session on EMMPs

6

Complex EMMPs require detailed reporting

Larger projects, or those with complicated EMMPs may require more detailed reporting to create an auditable record.

- ❖ A text summary or short analysis of EMMP implementation is needed:
 - Highlight key mitigation activities underway in the reporting period;
 - Any significant issues encountered; and
 - Corrective actions/adjustments made.
- ❖ Stand-alone Environmental Compliance reports may also be warranted (e.g., quarterly or semi-annual).



Now on to requirement #2:

7

“Mainstreaming” environmental performance

Environmental issues can be integrated, or “mainstreamed” into the project results framework for reporting purposes.

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

What is Reporting Requirement #2 again? ...

“One or more key project performance indicator(s) (project results framework) should reflect overall 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.

8

Bringing env. issues into 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

This intervention will NOT show good performance. . .



9

Bringing env. issues into results framework

EXAMPLE: Food for Peace

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

$$\sim 1 \text{ kg firewood/person/day} \times 70,000 \text{ beneficiaries} \times 365 \text{ d}$$

$$\sim 30,000 \text{ MT of firewood/yr}$$

Mitigation:

Improved cook stoves 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



10

“Environmentalizing” project indicators

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



11

USAID review of environmental reporting



*Who reviews EMMPs & environmental compliance reporting inside USAID?
Will environmental compliance checks be part of Mission M&E?*

As with all other aspects of the project, the COR or AOR is the primary reviewer.

But the MEO and M&E function may also be involved.

USAID environmental compliance oversight

| | |
|---|--|
| 1. Prior review/approval of partner-developed: → EMMP → ensure responsive to IEE/EA conditions → Project budgets and workplans → ensure EMMP implementation planned and funded → Project Reporting Framework → ensure environmental compliance reporting requirements are met | Primary responsibility for ensuring IP compliance lies with COR/AOR. MEO will also review/clear where activities are environmentally 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, <u>all visits</u> 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 COR/AOR or M&E Officer. MEO should visit the most environmentally sensitive activities (REA may assist). |

Session 14.

Environmental Compliance/ESDM Knowledge Game

Facilitated Team Competition

Summary

We have now examined, discussed, and/or practiced the following workshop topics:

1. The objectives of Environmentally Sound Design and Management (ESDM); the Environmental Impact Assessment (EIA) process and the development and application of fundamental EIA skills.
2. The implementation of USAID Environmental Procedures and purpose and structure of EMMPs.
3. The selection of environmental indicators and monitoring for environmental compliance.
4. Budgeting for environmental management and reporting on project environmental performance.

We will now play an environmental compliance/ESDM knowledge game to review key concepts related to core technical skills and knowledge. The game will take the form of a competition among small teams.

Further discussion of core content will occur in our “Parking Lot” session, in which outstanding technical issues will be resolved.

Game Briefing

Teams

Four (4) or five (5) teams with 6-8 persons/team; each team includes one non-participant recorder.

“Performance Assessment aligns with Programming Framework”:

Three (3) rounds of five (5) multiple-choice/fill-in-the-blank questions each; questions in each round correspond to core agenda topics and assess the objectives of that component. Questions increase in difficulty as the rounds progress.

Democracy and Governance

Teams must operate by consensus, reaching unanimous agreement on each answer.

Monitoring and Evaluation

The recorder for each team will verify consensus for each answer by show of hands and record the answer on the answer sheet. Recorders will verify that no books, notes, laptop computers or other electronic devices are employed to assist in answering questions.

Each team’s scores will be tabulated by an independent party (e.g., Assistant Emcee) at the conclusion of each round. Scoring by the independent party is final.

“Results Framework”

- First team to complete all questions in a round receives the most bonus points. Each subsequent team: 2 points less; last team receives no bonus. Any team working when time is called receives no bonus.
- Each correct answer: 5 points.
[NOTE: some questions have more than one element/choice. EACH correct element/response is worth 5 points.]
- Each incorrect answer: 3-point DEBIT.
[NOTE: multiple wrong answers on a question result in multiple debits.]
- No answer: 0 points.
- All answers in a round correct: 10-point bonus.
- Each round is time-limited at 12 minutes.
- Team scores will be posted to the front and updated after each round.

Implementation Procedures

1. MC briefs the game (contents of this session summary). Time pressure is part of the exercise!
2. Assistant MC assigns teams and recorders. Members of each team cluster together.
3. Deputize recorders.
4. Teams can briefly discuss strategy and elect captains.
5. MC asks recorders to confirm that all training materials and electronic aids are closed/off.
6. Distribute Round 1 questions to team recorders.
7. MC starts the 1st round; recorders open the envelopes and distribute questions. Teams begin.
8. Recorders blow their whistle/noisemaker when their team finishes.
9. Assistant MC records order in which teams finish.
10. Round concludes after 12 minutes, or when all teams are finished, whichever is first.
11. Assistant MC tabulates scores for each team; they are posted at the front.
12. Repeat steps 6-11 for the subsequent two rounds.
13. After three rounds, grand winner is declared and prizes are awarded.

In the event of a tie, a “sudden death” round of “special topic” questions will follow.

Session 15.

Special Topic: Pesticide Risks, Safer Use & Compliance

Technical presentation and dialogue

Summary

This session summarizes the environmental and health concerns attendant to pesticide use, the key elements of safer pesticide use, and USAID's procedures for environmental review of support to pesticide use and procurement.

These procedures define "use and procurement" broadly and add specific, additional requirements to the general pre-implementation environmental review process established by Reg. 216. These requirements are satisfied via a Pesticide Evaluation Report and Safer Use Action Plan (PERSUAP), which is formally an amendment to the project's IEE. The requirements of the Safer Use Action Plan portion of the PERSUAP are thus IEE conditions, and their implementation is mandatory.

Although PERSUAPs are generally developed by specialists, workshop participants may be involved in the review and implementation of PERSUAPs.

USAID policy and procedures regarding pesticide use are described in 22 CFR 216.3(b).

Objective

Brief the environmental, economic and human-health concerns attendant to Pesticide Use. Achieve a common understanding of the special environmental compliance requirements that apply to pesticide use and procurement, and of the key elements of safer pesticide use.

Special Topic:
Pesticide Risks, Safer Use & Compliance

GEMS Environmental Compliance-ESDM Training Series
USAID/Malawi • March 2013

Presentation Overview



- ❖ **Definition of Pest & Pesticide**
- ❖ **Pesticides Past & Present**
- ❖ **Pesticide Risks**
 - *Impacts on Humans & Exposure Pathways*
 - *Impacts on other organisms*
- ❖ **USAID's response**
 - *Policy: commitment to IPM*
 - *Regulatory: USAID's pesticide procedures*



USAID follows the US EPA
definition of pests

Pests are. . .

living organisms that occur where they are not wanted or that cause damage to crops, animals, humans or other animals.

Examples include: insects, mites, ticks, rodents (and other animals), unwanted plants (weeds, invasives), fungi, bacteria and viruses.



USAID follows the US EPA
definition of pesticides.

A pesticide is. . .

Any substance or mixture of substances intended for: preventing, destroying, repelling, or mitigating any pest.

What about "natural" or "biological" pesticides?

Pesticides derived from natural sources (like Pyrethrum) are still pesticides.

What about disinfectants?

The purpose of disinfectants is to kill bacteria or viruses. Disinfectants are pesticides. (except household bleach, common cleaners)

What about drugs?

Drugs used to control human or animal diseases are NOT pesticides.

Constituents and formulations

A modern pesticide

can come in different formulations:

is a combination of:

Active Ingredient (AI),
which kills the pest

+

A surfactant which makes the pesticide stick to the pest or plant

+

(Sometimes) a synergist which enhances the pesticide's action

+

A carrier
(like water, oil, or a solvent)

| | |
|-----|------------------------------|
| A | Aerosol |
| B | Bait |
| D | Dust |
| ED | Emulsifiable Concentrate |
| F | Flowable |
| G | Granules |
| ULV | Ultra Low Volume |
| WDG | Wettable Dispersible Granule |
| WP | Wettable Powder |

5

The need for pesticides in agriculture. . .

. . . is as old as agriculture

The first pesticides: Inorganic metals

4500 years ago

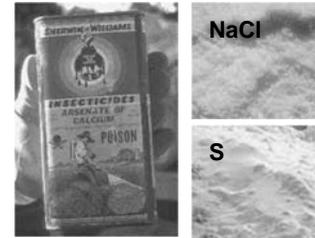
- ❖ Elemental Sulfur— still used today
- ❖ Sodium Chloride (salt) weed killer— can still be used

600 years ago

- ❖ Mercury
- ❖ Lead
- ❖ Arsenic

200 years ago for treated wood products, and as herbicides, insecticides and fungicides.

- ❖ Arsenates
- ❖ Copper, chromium
- ❖ Calcium, magnesium



6

Late 1800s–Early 1900s

Plant Extracts

- ❖ Pyrethrum — still used today
- ❖ Neem — still used today
- ❖ Rotenone — still used today
- ❖ Nicotine-Sulfur compounds
- ❖ Citronella — still used today

Petroleum products

- ❖ Oils, Soaps — still used today
- ❖ Kerosene — still used today

Gasses

- ❖ Cyanide — gone
- ❖ Methyl Bromide — phasing out

1800s Rotary Hand Dusters:



C-2

1920s

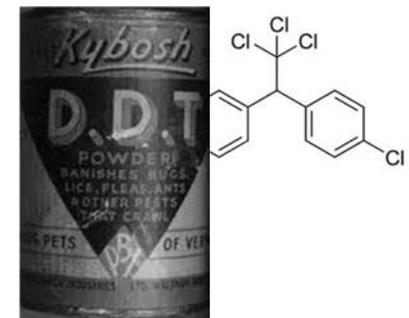


G-2

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Then. . . Synthetic Organic Pesticides

- ❖ **When?** 1939 with DDT, followed by other “chlorinated hydrocarbons”
- ❖ **Why?** Originally, to kill malaria & yellow fever mosquitoes during World War II



Chlorinated hydrocarbons (DDT, Aldrin, Dieldren) 1940s

Organophosphates (Chlorpyrifos, Diazinon) 1950s

Carbamates (Carbaryl, Bendiocarb, Propoxur)

8

As synthetic organic pesticides came into widespread use. . .

. . .unexpected things began to happen. . .

- ❖ Need more & more pesticide to kill pests—why?
- ❖ American Eagle populations declined rapidly—what happened?
- ❖ Blood samples from Eskimos in Arctic showed DDT contamination—what happened?

The Modern Era of Pesticides brought the modern era of **PESTICIDE RISKS**.
More on this in a moment. . .

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And today we have. . .

“Traditional” synthetic organic pesticides
Pesticide Shop

Newer insecticides modeled after plant extracts

Plant extracted pyrethrum (mix of pyrethrins) revived from the 1800s

Synthetic pyrethroids (cypermethrin, deltamethrin, lambda-cyhalothrin)

Chloro-nicotinyl (imidacloprid, thiacloprid)

+

“Next Generation Insecticides”

- ❖ Microbes (**bacteria, fungi, virus**)
- ❖ Microbial extracts (**BT, abamectin, sphinosad**)
- ❖ Insect Growth Regulators—I GRs (**diflubenzuron, hexythiazox, methoprene**)

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Put it all together and. . .

About 900 active ingredients in 20,700 products are currently sold in world markets



11

The need for extra scrutiny & concern

Pesticides are often essential.

But pesticides are potent killing agents. Their use has intrinsic dangers.

In developing areas, these dangers are worse because:

- *Quality control in manufacture, handling, labeling and packaging is often poor.*
- *Poor use practices are wide-spread.*

pesticide mis-use and mis-management can. . .

- Damage non-target ecosystems
- Affect non-target organisms (e.g., the “good bugs”)
- Cause chronic sickness, birth defects, cancers, & even death
- Persist/accumulate in the environment
- Lead to resistance and to resurgence of pests
- Result in loss of export markets



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Pesticide Impacts on Humans

- ❖ **Acute Toxicity:** Immediate (acute) poisoning leading to serious sickness or death.
- ❖ **Chronic Toxicity:** effects over the long term at lower total doses.
For example, **Cancer, Parkinson's Disease, Sterility, Organ Malfunction and Birth Defects.**

How do people receive dangerous doses of pesticides?

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Human Exposure Route #1: Unsafe Application/Handling Practices



Mixing pesticides with bare hands



Pouring pesticide into sprayer without protection

Pesticide Handling: What Not to Do



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The result . . .



Skin lesions

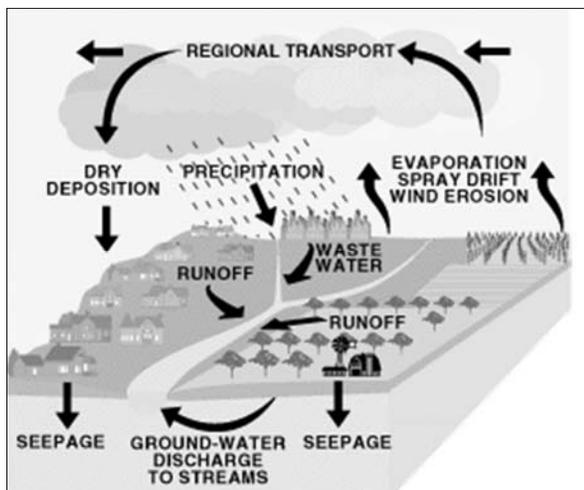


and unfocused vision

And far worse is possible (acute poisoning, cancers, birth defects, death. . .)

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Human Exposure Route #2: Drinking water



Pesticides can enter surface & groundwater by...

Runoff, seepage, spray drift, dust from fields

Well and stream contamination from poor mixing, clean-up practices

Leakage from obsolete pesticide stocks

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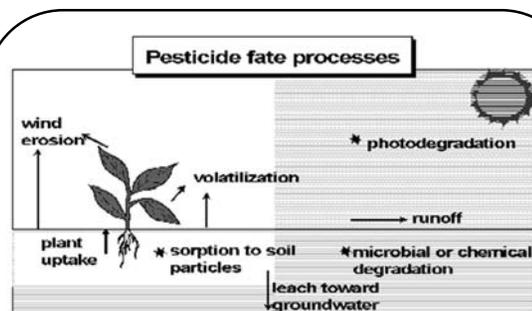
30+ yr-old obsolete USAID-funded pesticides (found during 2003-2004 FAO Survey)



- Proper disposal starts at \$3,000 to \$5,000 per ton, depending on which pesticides are found. Highly toxic ones are much higher.
- Costly site cleanup also needed after the barrels are removed

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Human Exposure Route #3: Food



Only a portion of pesticide ends up on/in food. But this portion can be dangerous (residues), can lead to loss of export markets AND impact non-target organisms.

Pesticide is sprayed on plants...

Spraying too close to harvest

Using the wrong pesticide

Using too much

Excess levels of pesticide in soil

...can all lead to harmful pesticide residues on/in food

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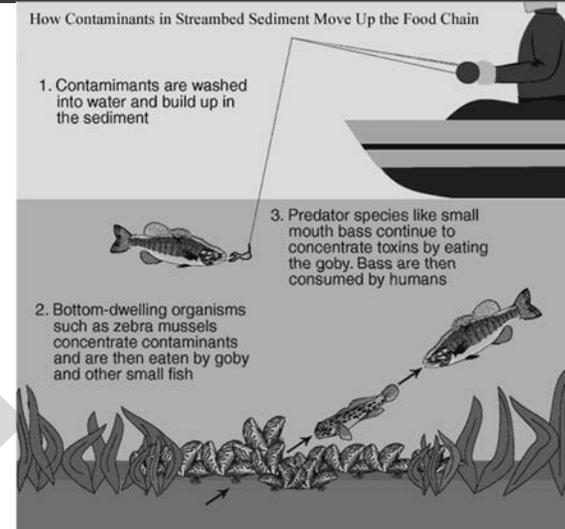
Bioaccumulation makes exposures worse

Some pesticides are PBTs—persistent, bioaccumulative toxins.

They degrade very slowly and accumulate in body tissues. Thus, the amount of pesticide in the body (the "load") increases with every exposure.

Adverse effects include damage to the nervous system and interference with reproduction & development.

PBTs accumulate in food chains—predators at the top of the chain (including people!) accumulate the heaviest loads.



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PBT Pesticides

- Aldrin
- Chlordane
- Dichlorodiphenyl trichloroethane (DDT)
- Dieldrin
- Hexachlorobenzene
- Mercury-based pesticides including, but not limited to, mercurous chloride and mercuric chloride
- Mirex
- Toxaphene
- Heptachlor
- 2,4,5-Trichlorophenol (2,4,5-T)

CHLORDANE CONQUERS CRABGRASS
IMPROVES LAWNS TWO WAYS

1 stops crabgrass before it starts!
2 kills lawn insects!

ONE EASY APPLICATION KEEPS LAWNS CRABGRASS-FREE ALL SUMMER!

APPLY CHLORDANE NOW! One year, several acres. A quart of granular chlordane will keep your lawn crabgrass-free and insect-free all summer. This is the only lawn care product that does both. Chlordane kills crabgrass before it starts and kills lawn insects. This one product does both. Crabgrass and lawn insects can make your lawn look like a desert. The chlordane kills crabgrass before it starts and kills lawn insects. This one product does both. Crabgrass and lawn insects can make your lawn look like a desert. The chlordane kills crabgrass before it starts and kills lawn insects. This one product does both.

CHLORDANE

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Pesticides in the environment affect many organisms, not just humans.

They can . . .

- ❖ kill pollinating insects necessary for crop production
- ❖ kill predator bugs and birds that keep pests in check
- ❖ kill organisms necessary for soil health
- ❖ kill fish, crustaceans, amphibians, aquatic insects & beneficial microbes



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. . .and pesticide misuse (and sometimes even responsible use) breeds pesticide resistance.

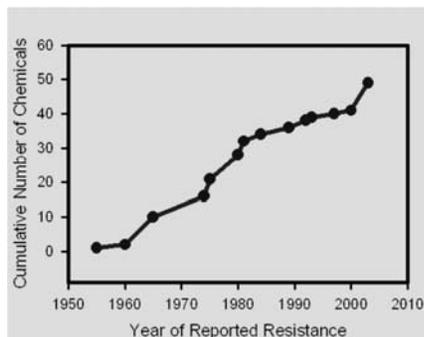
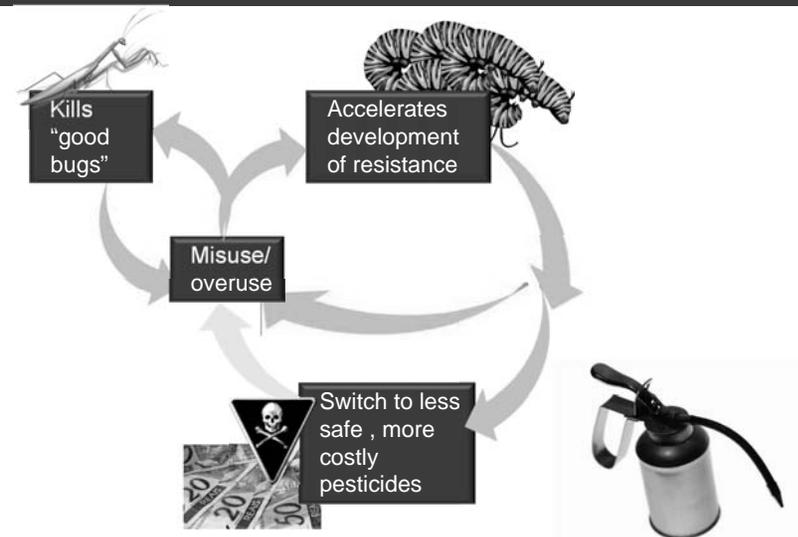


Fig. 3.1. Cumulative number of insecticides to which resistance in the Colorado potato beetle has been reported (Arthropod Pesticide Resistance Database, 2007).

<http://resistance.potatobeetle.org>

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Dangers of mis-use: Commonly observed “vicious circles”



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USAID's response to these dangers. . .

- 1 Agency-level policy commitment to Integrated Pest Management and SAFER USE more broadly
- 2 The "Pesticide Procedures" (Special and additional environmental review requirements under the agency's mandatory environmental procedures.)

USAID & Integrated Pest Management (IPM)

USAID policy: rely on Integrated Pest Management (IPM) as the framework for every activity (agricultural, health or other) that involves pesticide procurement or use

IPM...

Is ecologically-based pest management that promotes the health of crops and animals, and makes full use of natural and cultural control processes and methods, including host resistance and biological control.

Uses chemical pesticides only where and when the above measures fail to keep pests below damaging levels.

All interventions are need-based and applied in ways that minimize undesirable side effects.*



If a pesticide is used, it is the "least toxic" one to do the job.

*CGIAR policy statement on IPM

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Safer Pesticide Use: 3 Basic Elements

1. Integrated Pest Management

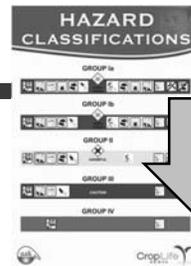
- Reduce the volume & toxicity of pesticides used

2. Safer storage, application and disposal

- Minimize human exposure and environmental contamination from the pesticide that is used.

3. Safe Purchase/ Quality assurance

- Make sure the bottle contains what the label says.



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Pesticide Procedures: 22 CFR 216.3(b)

- ❖ Apply to every project that will procure, use, or recommend for use one or more pesticides (certain emergency conditions exempted)
- ❖ The environmental review required for all project or sector programs must assess the proposed pesticide use in terms of the following 12 factors;
 - ✓ US EPA registration status
 - ✓ Basis for selection
 - ✓ Extent to which IPM is used
 - ✓ Application methods and safety equipment
 - ✓ Toxicology and mitigation measures
 - ✓ Efficacy
 - ✓ Target vs. nontarget species
 - ✓ Environmental conditions at the location of proposed use
 - ✓ Availability of alternatives
 - ✓ Country's ability to control and regulate pesticides
 - ✓ User training
 - ✓ Monitoring provisions

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Pesticide Procedures: 22 CFR 216.3(b)

- ❖ This analysis is specialized IEE, sometimes called a **PESTICIDE EVALUATION REPORT & SAFER USE ACTION PLAN (PERSUAP)**
- ❖ The **SUAP** sets out the conditions that would govern pesticide use to assure safety.
- ❖ Based on the **PERSUAP**, use of the pesticide(s) is granted or denied, or more detailed study required.
- ❖ **Conditions specified in the SUAP** must then be implemented.

NOTE: Sometimes, a full Environmental Assessment is called for (e.g., for pesticides that are not registered by USEPA but are judged essential)

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What is “pesticide procurement or use”?

! *Be aware. . .*
**USAID interprets
“pesticide procurement
or use” very broadly.**

Specifically. . .

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What is “pesticide procurement or use”?

Procurement includes . .

1. *Direct purchase of pesticides*
2. *Payment in kind, donations, provision of free samples and other forms of subsidies*
3. *Provision of credit to borrowers could be procurement*
4. *Guarantee of credit to banks or other credit providers could be procurement*

Use includes . .

1. *Sale*
2. *Handling, transport, storage,*
3. *Mixing, loading, application*
4. *Disposal*
5. *Provision of fuel to transport pesticides*
6. *Technical assistance in pesticide management*

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The definition of “procurement or use” does NOT include. . .

- ❖ **Pesticide used in evaluation plots & other research, IF the following requirements are met:**
 - *Surface area of under 4 ha,*
 - *Supervised by researchers,*
 - *Application by trained individuals*
 - ***The treated products are not consumed by people or livestock,***
- ❖ **Technical assistance for development of host country pesticide regulatory capabilities**
- ❖ **Support for training in safer pesticide use, not involving actual application or use of pesticides.**

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Why is EPA registration status important?

Under US law, US EPA “registers” particular pesticides to particular uses.

When the proposed pesticide is NOT approved for a similar use by USEPA,

more detailed study is required in the form of a full Environmental Assessment

When the proposed pesticide IS approved for a similar use by US EPA, BUT the proposed use is RESTRICTED by US EPA on the basis of USER HAZARD,

The PERSUAP must also contain a user hazard evaluation.

! Why? Pesticides restricted by or not approved by US EPA are considered high-risk!

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Useful Web Sites

- www.epa.gov/pesticides/reregistration/status.htm
- www.pmep.cce.cornell.edu/profiles/extoxnet
- www.pesticideinfo.org
- www.epa.gov/pesticides/safety/healthcare/handbook/handbook.htm

Note: The information in these websites is useful for development professionals but does not substitute for an expert to apply it correctly

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Session 16.

Special Topic: Global Climate Change & ESDM in Malawi

Technical presentation and dialogue

Summary

Global Climate Change (GCC) is expected to have very significant impacts in Africa (and in USAID's other operational regions), with disproportionate impacts on the most vulnerable. USAID is increasingly designing and implementing projects and programs whose primary objective is GCC-related:

- adaptation programming to help communities and countries build resilience to climate change impacts;
- clean energy programming to support low emission economic growth; and
- sustainable landscapes programming focused on conserving forests and reducing deforestation (to reduce emissions).

But beyond programming centered on GCC objectives, robustness to GCC has become a key dimension of environmentally sound design and management (ESDM) for almost all projects and activities.

For example as discussed previously in this workshop: are the crop varieties to be promoted by a project appropriate given likely changes in precipitation? Are structure siting and designs appropriate given likely changes in storm frequency/intensity and flood probabilities?

Assuring that *all* designs are robust to anticipated GCC-driven changes in local environmental conditions is one way in which USAID programming should support the concept of *resilience* and *adaptation* to GCC.

USAID-funded activities rarely have significant effects ON climate change in the sense of being significant contributors to global GHG emissions. However, climate change is driven by the sum of many small actions. So even small-scale projects should, while operating within their development objectives, implement feasible *emissions mitigation*. That is, means and measures to reduce their direct or indirect GHG emissions and/or increase sequestration.

Objective

Understand the basic concepts of GCC adaptation and GHG mitigation in design of typical sectoral activities in the USAID/Malawi portfolio.

Session 17.

Special Topic: Water Quality Testing

Technical presentation and dialogue

Summary

Access to safe drinking water is central to the recovery and/or development of any community. The increased use of water for agricultural irrigation can also accelerate economic growth and improve livelihoods. USAID supports a range of activities in the Water, Sanitation and Hygiene (WASH) and agricultural sectors, many of which entail the establishment of new water access points or the rehabilitation of existing structures or systems. In these scenarios USAID must assure that water supplies meet certain quality criteria for domestic and agricultural purposes. As such, water quality testing is a key aspect of any water provision effort.

Specific water quality testing requirements will vary by activity, but generally must account for:

- a) a baseline, or initial water quality assessment to determine if water is safe; and
- b) a periodic testing or monitoring regime to determine if water source becomes contaminated.

The initial test will ideally provide information on the chemical, biological and physical qualities of the proposed water source (e.g., well, natural spring, stream, etc.). Extensive analyses are not always feasible, however, so USAID has also established minimum testing criteria focusing on the contaminants typically of greatest concern: inorganic Arsenic (As) and fecal coliform. Monitoring requirements, including frequency of testing, are established so that water quality can be assured as project activities progress.

Initial water quality testing and monitoring requirements are typically contained in a Water Quality Assurance Plan (WQAP); many IEEs will require preparation of a WQAP in response to proposed water provision efforts (domestic or agricultural). The WQAP will also specify a Response Protocol that details the steps to be taken in the event that water quality test results exceed certain thresholds (e.g., if As or coliform levels are higher than allowed).

Water quality testing often presents a practical challenge for project staff. In addition to the logistical demand of initial testing and monitoring across many, potentially dispersed systems or water access points, certain tests may require refrigeration, incubation and laboratory analysis. There are a number of field-oriented tools and resources available to meet some of the most common water quality testing requirements. However, projects are encouraged to explore multiple options based on their specific water quality testing needs (e.g., bigger investment in field equipment, use of contract labs, etc.).

Objectives

Review water quality testing requirements and procedures for USAID-supported water provision activities.

Key Resources

- Sample Water Quality Assurance Plan (WQAP) (see following)

Sample Water Quality Assurance Plan

This Water Quality Assurance Plan (WQAP) is prepared in conformance with the Project Initial Environmental Examination (IEE), which specifies that such a plan will be developed as a condition for the establishment of new water access points. The WQAP condition—one of four IEE conditions governing this type of activity—states:

The establishment of new water access points for essentially irrigation demonstration purposes shall regardless be assumed to serve at least occasionally as domestic and drinking water sources, and will therefore be subject to the following **conditions** for the **direct provision of small-scale water supply**:

- Water quality assurance plan: the Project will develop and implement a Water Quality Assurance Plan that will ensure that all new and rehabilitated USAID-funded water supplies provide safe drinking water, defined as meeting local and WHO water quality standards.
 - This Plan must be approved by the REA prior to initiation of these activities.
 - The plan must include and assign responsibility to the Project for initial water quality testing. When feasible, the program must also set in place capacities and responsibilities to provide reasonable assurance that ongoing water quality monitoring occurs.
 - The standards for initial and ongoing testing— including types of contaminants for which testing should be conducted, testing methods, testing frequency, and issues such as public access to results— should follow any applicable USAID guidance, as well as local laws, regulations and policies.
 - The plan must include a response protocol in the event that the water does not meet water quality standards.
 - The plan must include testing for Arsenic per Guidance Cable State 98 108651. Specifically, the USAID managing team must assure that the standards and testing procedures described in “Guidelines for Determining the Arsenic Content of Ground Water in USAID-Sponsored Well Programs in Sub-Saharan Africa,” available [here](#), are met. (Note that this guidance requires initial testing, and quarterly testing for four quarters. *If the program terminates in less than four quarters, remaining testing is the responsibility of the mission. Water violating the 10ppb Arsenic standard may not be supplied for public consumption.*)¹

In order to implement the conditions prescribed here, the Project will undertake the following activities in conjunction with the establishment of all new water access points, or the rehabilitation of existing water access points:

1. **Initial Water Quality Testing.** At the time of the installation/establishment and/or rehabilitation of the water access point, the Project will complete the following water quality tests:

¹ All contractors, grantees or cooperative agreement groups must test for arsenic to assure that the beneficiaries of USAID-sponsored well drilling programs are supplied with water that meets U.S. Environmental Protection Agency (USEPA) Arsenic Rule criteria. Additional information on the USEPA Arsenic Rule is available [here](#).

- a. **Arsenic.** In compliance with Guidance Cable State 98 108651, the Project will test groundwater-sourced water access points for inorganic arsenic at a level not to exceed 10 ppb (10 micrograms/liter [.01 mg/l]). Following completion of the well installation/construction phase, the new or rehabilitated well will be pumped and tested, with samples taken once water that is representative of the aquifer is found (i.e., once equilibrium conditions have been established rather than stagnant water around the well, or water that has been affected by installation or drilling). Initial arsenic testing will be completed using low-cost field test kit technology, which the Project will obtain from an overseas vendor.²
 - b. **Total Coliform.** The Project will test all new or rehabilitated water access points (groundwater- *and* surface water-sourced) for no detectable fecal coliform in any 100 ml sample. Initial coliform testing will be completed using either:
 - i. Low-cost field test kits, which the Project will obtain from an overseas vendor; or
 - ii. Laboratory analysis, pending confirmation of adequate and available facilities.
2. **Water Quality Monitoring.** The Project will monitor water quality at water access points established or rehabilitated by the project, testing for the following contaminants at stated intervals:
- a. **Arsenic.** In compliance with Guidance Cable State 98 108651, the Project will monitor groundwater-sourced water access points for inorganic arsenic at a level not to exceed 10 ppb (10 micrograms/liter [.01 mg/l]). Following the initial water quality test, the Project will sample groundwater for inorganic arsenic not less than once per quarter for a minimum of four (4) quarters. Arsenic monitoring will be completed using the same technology and sampling method as the initial water quality test.
 - b. **Total Coliform.** The project will monitor all new or rehabilitated water access points (groundwater- *and* surface water-sourced) for no detectable fecal coliform in any 100 ml sample using a comparable technology and sampling method as the initial water quality test. Total coliform monitoring will be completed at least once every six months as long as the water point remains accessible as a source of drinking water or for domestic purposes.
3. **Response Protocol.** If the initial water quality testing or at any time the water quality monitoring indicate that contaminant levels exceed the thresholds established in this WQAP, the Project will take the following actions:
- a. **If arsenic levels are exceeded.** If field test results indicate inorganic arsenic levels greater than 10 ppb (10 micrograms/liter [.01 mg/l]), and the Project wishes to continue use of the groundwater-sourced access point being sampled, the Project will submit a sample to a qualified laboratory for analysis. The laboratory selected must be one approved by either the Regional Environmental Advisor (REA) or Mission Environmental Officer (MEO). If the selected laboratory confirms the presence of inorganic arsenic in

² At current prices, the Project can complete arsenic water quality field testing for approximately \$1 USD per sample. Field test kits from Hach (available [here](#)) are approved by USAID to meet arsenic water quality testing requirements. Other examples of low-cost arsenic field test kits include the QUANTOFIX® Arsenic 10 kit (available [here](#)). The Project will verify with USAID any non-Hach products/kits to meet arsenic testing/monitoring requirements prior to use.



Special Topic: Water Quality Testing

GEMS Environmental Compliance-ESDM Training Series
USAID/Malawi • March 2013

Session Objectives

- Establish the importance of water quality testing
- Understand USAID requirement for water quality testing
- Discuss development of Water Quality Assurance Plans
- Review testing options

2

Why test water quality?

- A safe water supply is central to many types of development objectives
 - *Community health (e.g., WASH)*
 - *Agriculture*
 - *Food processing/manufacturing*
 - *Health care provision (e.g., hospitals, clinics, etc.)*
- Testing is the primary means of understanding water quality and of ensuring provision of a safe supply and environmental health
- Water quality testing helps protect the results and the reputation of the project

3

The USAID approach

- USAID Environmental Procedures address water quality testing through:
 - *Inclusion of water quality-related risks in the IEE (or EA)*
 - *EMMP development and implementation*
 - *Regional best practice*
- Many testing standards conform with international practices in addition to U.S. law
- USAID-funded projects must also adhere to national water quality standards
 - *Malawi National Water Policy (NWP) of 2005*

4

Water quality standards in Malawi

Ministry of Agriculture, Irrigation and
Water Development



5

How does USAID require testing?

- The Reg. 216 pre-implementation environmental review process identifies and characterizes potential adverse impacts related to water quality
 - *IEE (or EA) includes conditions to mitigate adverse impacts*
- EMMP integrates the water quality-related conditions
 - *Conditions are “operationalized” through specific mitigation, monitoring, and reporting requirements*
 - *IEE conditions may specify need to conduct water quality testing*
- Based on complexity or risk, specialized compliance documentation may be needed

6

USAID ‘best practice’ approach to testing

- The Water Quality Assurance Plan (WQAP)
 - *Preparation of a WQAP is frequently included as an IEE/EA condition to mitigate potential adverse impacts*
 - *WQAP deals specifically with water quality testing*
 - *WQAP is prepared by partner and reviewed/approved by USAID; REA approval is frequently required*
 - *WQAP can be attached to—and implemented in parallel with—EMMP, providing detailed guidance for project staff*

7

Scope of the Water Quality Assurance Plan

- The Water Quality Assurance Plan typically includes:
 - *Identification of responsible parties*
 - *Standards for initial water quality testing*
 - *Monitoring regime (e.g., contaminants, frequency, method)*
 - *Response Protocol*
 - *Requirement for Arsenic (As) testing of groundwater from USAID-funded well projects—a USAID priority!*

8

Making the WQAP an IEE condition

- Water quality assurance plan: the Project will develop and implement a Water Quality Assurance Plan that will ensure that all new and rehabilitated USAID-funded water supplies provide safe drinking water, defined as meeting local and WHO water quality standards.
 - This Plan must be approved by the REA prior to initiation of these activities.
 - The plan must include and assign responsibility to the Project for initial water quality testing. When feasible, the program must also set in place capacities and responsibilities to provide reasonable assurance that ongoing water quality monitoring occurs.
 - The standards for initial and ongoing testing— including types of contaminants for which testing should be conducted, testing methods, testing frequency, and issues such as public access to results— should follow any applicable USAID guidance, as well as local laws, regulations and policies.
 - The plan must include a response protocol in the event that the water does not meet water quality standards.
 - The plan must include testing for Arsenic per Guidance Cable State 98 108651. Specifically, the USAID managing team must assure that the standards and testing procedures described in “Guidelines for Determining the Arsenic Content of Ground Water in USAID-Sponsored Well Programs in Sub-Saharan Africa,” available [here](#), are met. (Note that this guidance requires initial testing, and quarterly testing for four quarters. *If the program terminates in less than four quarters, remaining testing is the responsibility of the mission. Water violating the 10ppb Arsenic standard may not be supplied for public consumption.*)¹

9

Options for water quality testing

- WQAP will specify test method, sampling, etc.
- Testing technology varies
 - *Complexity*
 - *Cost*
 - *Speed*
 - *Accessibility*
 - *Need to consider these factors when developing WQAP*

10

Options for water quality testing

- Field test kits are available
 - *Numerous As field test kits available; less than \$1 USD/test*
 - *Field testing for Coliform more challenging; mobile kits available, but costly. Need for incubation presents challenge*
- Laboratory analysis
 - *Can provide more reliable results*
 - *May incur significant expense*
 - *Transport from sampling site can compromise results*
- Availability/accessibility are key considerations

11

Session 18.

Special Topic: Subproject Review—Africa Bureau Environmental Review Form (ERF) & Report

Technical presentation and dialogue

Summary

Many USAID programs and large projects include *subprojects*. These are small-scale activities that are: (1) carried out within—or “under the umbrella” of—a larger project; and (2) are not fully identified or designed when the larger project or program is approved.

Subprojects pose an environmental compliance challenge: Reg. 216 requires environmental review prior to activity implementation. However, subprojects typically are not yet clearly defined/designed when the overarching project IEE is written.

The standard solution is that the IEE contains a *negative determination with conditions* for the anticipated subproject activities. The “condition” in this scenario is that a simplified EIA process is established to review subprojects and determine mitigation and monitoring conditions. This is typically only allowable if:

- The *general nature* of subproject activities is known; and
- These activities generally have low or easily controllable potential adverse impacts.

The Africa Bureau *Environmental Review Form* (ERF) is the most common instrument for implementing these simplified environmental review procedures for subprojects. The form’s instructions guide the reviewer through a subproject screening, and then preliminary assessment process for subject activities.

The Africa Bureau ERF was updated in late 2010 to clarify appropriate use, and to reflect recent changes in AFR best practice. This session will highlight the recent changes and overall use/application of the ERF.

Under the ERF screening process, subproject activities are classified as either: (a) requiring no further environmental review; or (b) requiring at least an environmental review report. The environmental review report resembles a shorter, simplified IEE. Like the IEE, it is equivalent to a “preliminary assessment” in general EIA procedures.

Objectives

Brief the subproject review concept and procedure and the updated Environmental Review Form (ERF). Outline the circumstances under which this process can be employed within AFR projects/programs.

Key Resource

- Updated AFR *Environmental Review Form* (see following)

Special Topic:

Subproject Review: Using the Africa Bureau Environmental Review Form (ERF) & Report

GEMS Environmental Compliance-ESDM Training Series
USAID/Malawi • March 2013

Session Objectives

- Understand the subproject concept and the environmental compliance challenge it presents
- Discuss use of the Africa Bureau *Environmental Review Form* (ERF) process for subprojects
- Review the ERF screening process
- Explain preparation of the *Environmental Review Report* (ERR)

2

What are subprojects?

Subprojects are . . .

Smaller activities executed under a larger project or program
e.g., a subgrant program, an “umbrella project”

! Subprojects are a problem for Reg. 216.

Why?

3

What is the problem?

1. Subprojects are often not defined when the project is proposed and the IEE written
2. But the first step of any EIA process (including Reg. 216) is understanding the activity!
3. Reg. 216 requires review of activities **BEFORE** funds are obligated

Understand the proposed activity

Why is the activity being proposed?

What is being proposed?

Screen the activity

Based on the nature of the activity what level of environmental review is indicated?

4

How do we resolve “prior review” issue?

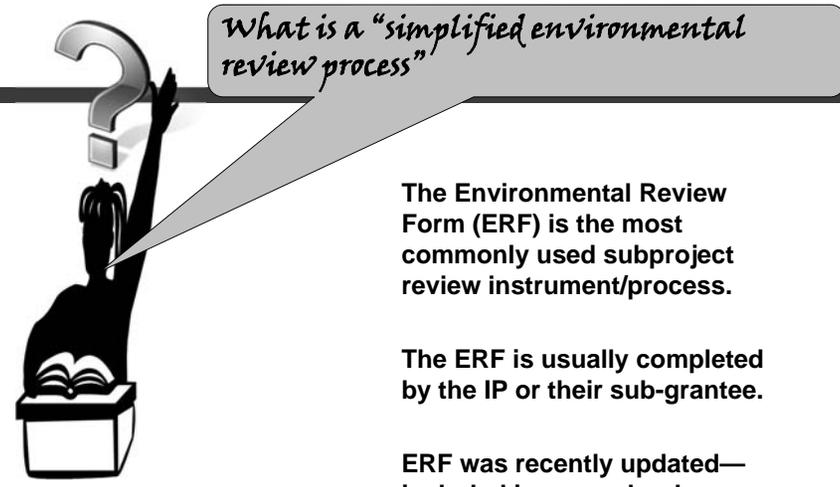
Two conditions must be met:

1. General nature of subproject activities must be known.
2. These activities must have low or easily controllable potential adverse impacts.

IF these conditions are met, subproject activities can be approved conditionally.

- That is, the IEE contains a **negative determination with conditions**
- Condition is that each subproject is subject to *simplified environmental review*

5



What is a “simplified environmental review process”

The Environmental Review Form (ERF) is the most commonly used subproject review instrument/process.

The ERF is usually completed by the IP or their sub-grantee.

ERF was recently updated— included in sourcebook

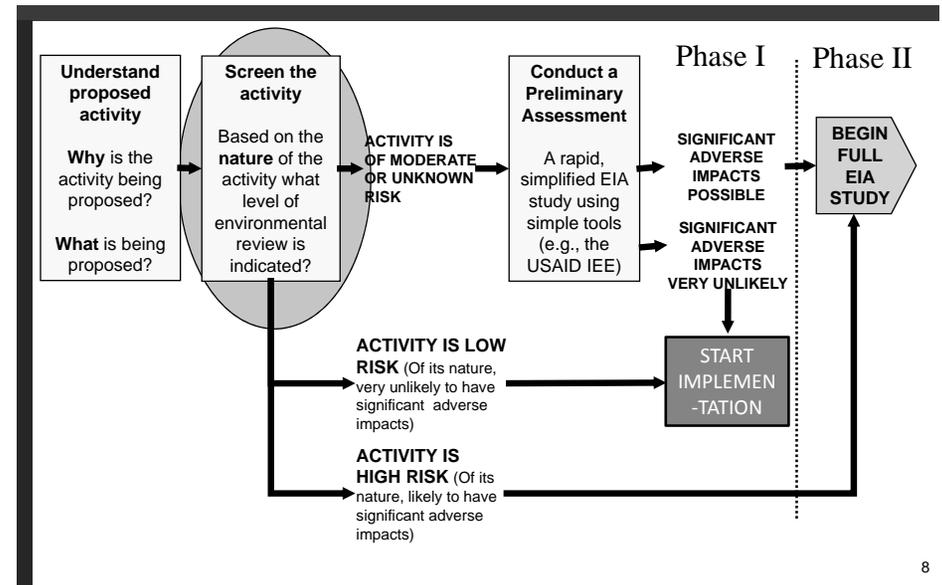
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Getting started with the ERF

Subproject review starts the same way that all EIA processes start. . .

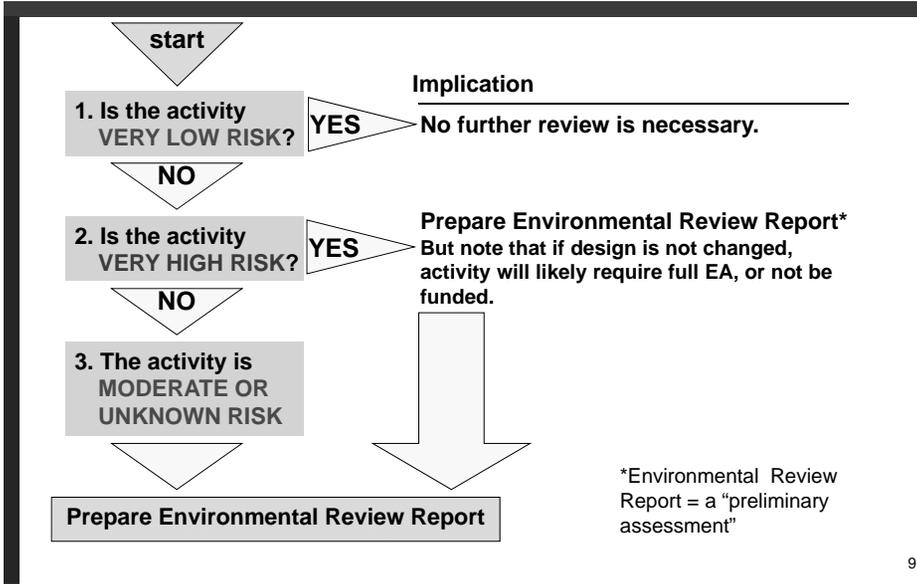
7

... understand, then screen



8

Screening under subproject procedures



9

How do we screen?

The ENVIRONMENTAL REVIEW FORM (ERF) guides the process step-by-step:

- 1 LIST each activity
- 2 CHECK EACH activity against two lists
 - A list of "very low risk" activities
 - A list of "very high risk" activities
- 3 RECORD the screening result for each activity

3 possible results:
 very low risk,
 very high risk,
 moderate/unknown risk

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. Concise for all moderate/unknown and high-risk activities ONLY) | | | |
|---|--|------------|---------------------------|--|---------------|---|--|
| | Very Low Risk | High-Risk* | Moderate or Unknown risk* | significant adverse impacts are very likely | minor impacts | significant adverse impacts are very unlikely | significant adverse impacts are possible |
| 1. | | | | | | | |
| 2. | | | | | | | |
| 3. | | | | | | | |

10

What is an activity?

✓ 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. |

Screening is done at the activity level, NOT the action level.

11

Examples: very low, high risk activities

Some "very low risk" activities

- Education, technical assistance or training (except for activities directly affecting the environment)
- Community awareness initiatives
- Technical studies not involving intrusive sampling of endangered species or critical habitats

Some "VERY HIGH RISK" activities

- River basin or new lands development
- Planned resettlement of human populations
- Penetration road building
- Drainage of wetlands or other permanently flooded areas

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What about “moderate or unknown risk” activities?

By definition, if an activity is

- NOT “very high risk”
- AND NOT “very low risk,”

THEN it IS “moderate or unknown risk”

The form lists some **REPRESENTATIVE moderate-risk activities**

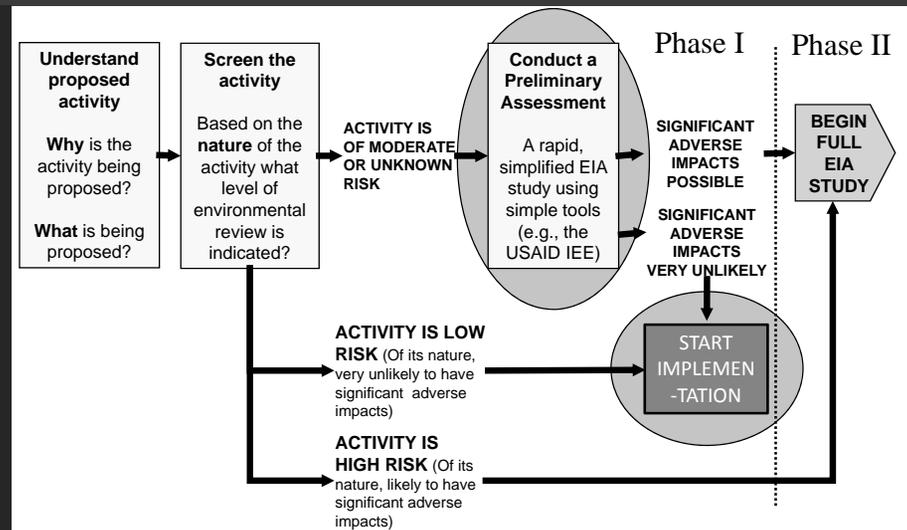
! This list is not exhaustive!

Moderate-risk activities include. . .

- **Small-scale infrastructure with known potential to cause environmental harm**
- **Field agricultural experimentation of MORE than 4 ha.**

13

After screening, what next?



14

After screening, two possibilities ...

1 If all activities are “very low risk,” environmental review process ends → sign and submit!

2 If any activities are:
 ▪ moderate/unknown risk, or
 ▪ very high risk

an Environmental Review Report (ERR) must be completed.

Environmental Review Report (ERR):

1. Summary of Proposal
2. Description of Activities
3. Site-specific environmental Situation & Host Country Requirements
4. Environmental Issues, Mitigation Actions, and Findings
5. EMMP
6. Other information (photos, references, individuals consulted)

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Purpose of Env. Review Report (ERR)

Like any preliminary assessment the purpose of the ERR is to. . .

Provide documentation and analysis that:

- **Allows the preparer to recommend whether or not significant adverse impacts are likely**
- **Allows the reviewer to agree or disagree with the preparer’s recommendations**
- **Sets out mitigation and monitoring for adverse impacts**

What recommendations result from an ERR?

16

ERR Findings

For **EACH** activity of:

- Moderate or unknown risk
- Very high risk

The preparer recommends one of three findings:

ERR Findings:

1. Significant adverse impacts very unlikely
2. With specified mitigation and monitoring, significant adverse impacts very unlikely
3. Significant adverse impacts are possible

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Final steps: the preparer ...

RECORDS the findings

SIGNS the certification

SUBMITS the Environmental Review Form & ERR to the COR or AOR

WAITS for approval before expending any resources on the activity

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 | Significant adverse impacts are very unlikely with mitigation | Significant adverse impacts are very unlikely with mitigation and monitoring |
| 1. | | | | | | |
| 2. | | | | | | |
| 3. | | | | | | |

18

What about the signed certification?

The certification:

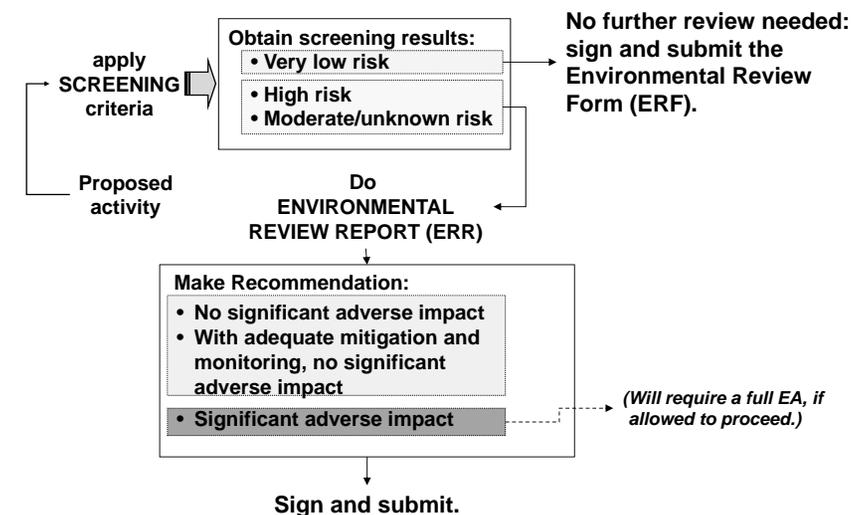
- Affirms that the ERF and ERR are correct and complete
- Commits the IP to implementing the mitigation and monitoring measures specified in the ERR
- Commits the IP to making sure that field staff, managers and partners understand environmentally sound practices for the activities in question

| Who approves? | |
|---------------|--|
| C/AOR | Always |
| MEO | |
| REA | |
| BEO | if any screening results are "high risk"*, or if there are any findings of "significant adverse impacts possible"* |

*should be very rare

19

Overview of the ERF and ERR process



20

Adapting ERF process to project needs

The ERF is a GENERAL form. It should be adapted each time it is used.

For example:

1

Customize screening lists

to reflect specific subproject activities, and specific local environmental issues.

3

Don't use the ERF at all!

Project-specific checklists and other approaches are possible.

2

Create "standard mitigation" (best practices) for specific subproject activities

- Standard mitigation or best practices for specific activities can save the effort of drafting repetitive ERRs
- Such activities *could* fall into a fourth screening category: "moderate risk with standard mitigation" ...

Activities in this fourth category would not require an ERR, but would be required to follow the standard mitigation measures developed by the project

Session 19.

Resolving the “Parking Lot”:

Final General Q&A Session

Facilitated Discussion

Summary

Through the technical presentations, group work and discussions we have identified a number of “parking lot” items—questions and issues that could not be easily addressed at the time they arose, but which are important to answer and resolve before the end of the workshop. Additional issues may have been raised during yesterday’s Environmental Compliance/ESDM Knowledge Game.

As we prepare to conclude the workshop, we will use this session to discuss—and hopefully resolve—these parking lot issues in a facilitated discussion that draws on assembled expertise of USAID environmental staff, the consultant trainers, and participants.

Objective

Conclude the “core technical skills and knowledge” portion of the workshop by resolving parking lot issues.

Key Resource

- List of “parking lot” issues compiled during the workshop.

Session 20.

Roles, Responsibilities & Resources

Technical presentation and dialogue

Summary

This session brings together information that has been introduced throughout the workshop, in addition to addressing some new topics. *All concern the processes, roles and responsibilities for environmental compliance in missions and operating units.*

Key topics are:

- How environmental compliance is mainstreamed (integrated throughout) Agency operations by the Automated Directives System (ADS).
- The roles and responsibilities of USAID staff and IPs with respect to the environmental compliance of USAID projects.
- The importance of incorporating best-practice Environmental Compliance Language (ECL) in solicitations and awards and the benefits of using the ECL tool for this purpose.
- Resources available to support environmental compliance and environmentally sound design and management.

IP and USAID environmental compliance roles and responsibilities post-award are summarized in the following table:

| Project stage | Implementing Partner | USAID |
|---------------------------------------|--|--|
| Workplan & PMP Development | Develops EMMP Integrates EMMP into budget and workplan Determines environmental compliance reporting | Review and approval of: 1. the EMMP (for responsiveness to IEE/EA conditions and 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. |
| 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 should integrate a quick check for significant environmental design/management problems. For environmentally sensitive activities, specific visits should be made to verify EMMP implementation. |

Objective

Understand environmental compliance roles and responsibilities of USAID staff and IPs and the tools and resources available to facilitate environmental compliance.

Roles, Responsibilities & Resources

GEMS Environmental Compliance-ESDM Training Series
USAID/Malawi • March 2013

Environmental Compliance & the Automated Directives System (ADS)

- **USAID's Automated Directives System (ADS) sets out mandatory procedures, roles & responsibilities for:**
 - "Upstream compliance:" Design & 22 CFR 216 process
 - "Downstream compliance:" implementing IEE & EA conditions



2

Environmental Compliance & the ADS

ADS 204 ("Environmental Procedures") is the core ADS reference. But environmental compliance is mainstreamed throughout the ADS.

Overarching requirement:
Operating units must have systems in place for environmental compliance over life of project & must make sufficient resources available for this purpose

(202.3.6; 204.3.4)

| Compliance Requirement | Responsible Parties | ADS Reference | |
|--|--|--|---|
| Environmental considerations in activity planning | Team Leaders, Activity Managers | 201.3.8.1 204.3.3 | |
| No activity implemented without approved Reg. 216 environmental documentation | COR/AOR/ Activity Manager | 201.3.9.3 201.3.11 204.3.1 204.3.3.b 303.3.2.e | |
| IEE & EA conditions incorporated into procurement instruments | COR/AOR/ Activity Manager; Agreement Officer | 204.3.4.a.6 303.3.6.3e 303.3.13 | |
| IEE & EA conditions are implemented, and implementation is monitored & adjusted as necessary | COR/AOR | 202.3.6; 204.3.4 303.2.f | |
| Environmental compliance documentation is maintained | PO, COR/AOR, Team Leader, MEO | 202.3.4.6 | 3 |

A Note About Record Keeping

- **Approved 22 CFR 216 documents are kept in two places**
 - in official project files maintained by **C/AOR**
 - in official BEO files
- **22 CFR 216.10 makes all of these available to the public**
 - **Agency-wide searchable database** of all Reg. 216 doc's approved since 2000:
<http://gemini.info.usaid.gov/egat/envcomp/>
- **Annual reporting is required**



4

Mission Environmental Officer (MEO)

- Quality Assurance/Quality Control reviewer for Reg. 216 docs
- Clears Reg. 216 docs before they go to Mission Director
- Mission compliance advisor and coordinator; assists in compliance monitoring
- Mission point of contact to Regional Environmental Advisor and Bureau Environmental Officer.

5

Regional Environmental Advisor (REA)

- Based in regional Missions
- Environmental compliance technical assistance to Missions
- Provides quality assurance and quality control of Reg. 216 documentation before it goes to the Bureau Environmental Officer.

6

Bureau Environmental Officer (BEO)

- Based in Washington, D.C.
- Oversees environmental compliance in their Bureau
- Primary decision maker on 22 CFR 216 threshold decisions for activities under the purview of their Bureau.

7

Sector Teams & Mission Management

CORs/AORs and Activity Managers.

Assure Reg. 216 documentation in place. Assure IEE/EA conditions and compliance requirements incorporated into procurement instruments. Monitor compliance with IEE/EA conditions and modify or end activities not in compliance.

Team Leaders

Oversee CORs/AORs. Assure that their teams have environmental compliance system in place.

Mission Director

Ultimately responsible for environmental compliance. Mandatory clearance on all Reg. 216 environmental documentation.

Primary Responsibility for Environmental Compliance

! The MEO is a member of every sector team (ADS 204.3.5)

8

Agency Environmental Coordinator, Office of the General Counsel

Agency Environmental Coordinator (AEC)

Oversees 22 CFR 216 implementation and interprets Reg. 216 in new situations.

Concurs in AA's appointments of BEOs.

Decides appeals to BEO decisions (rare). Presents appeals of AEC decisions to CEQ (rare) Coordinates EIS process for USAID (rare)

Regional Legal Advisors (RLAs)

Provide legal advice on environmental compliance to field staff. Some regions require RLA clearance on Reg. 216 documents.

Assistant General Counsels (AGCs)

Provide legal advice to BEOs and RLAs on environmental compliance in their regions.



BEOs and AEC take legal advice into account but are responsible for decision-making in interpreting 22 CFR 216

9

Reg. 216 docs: Who writes? Who clears?

Who writes?

- AOR/COR responsible for assuring Reg. 216 documentation is in place.*
- Can engage a consultant/contractor to develop— Environmental Assessments almost always developed by third-party consultants.
- USAID is responsible for contents/determinations **NO MATTER WHO DEVELOPS IT!**

Go to the field before you write

Who clears?

- COR/AOR, Activity Manager or Team Leader
- MEO (for Mission)
- REA (depending on Mission/regional policy)
- **Mission Director or Washington equivalent clears**
- **Bureau Environmental Officer concurs.** Responsibility/authority cannot be delegated.

**Required by
Reg. 216**

10

Who is responsible?

USAID

Assures Reg. 216 documentation in place. Establishes/approves environmental mitigation and monitoring conditions. Verifies compliance.

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.

11

Implementing Partners

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

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 sub-project Environmental Review Reports (ERRs) (for sub-grants/sub-projects).

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

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 &/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 C/AOTR or M&E Officer

MEO should visit the most environmentally sensitive activities (REA may assist)

12

Environmental Compliance & Procurement Instruments

ADS Requires. . .

"Incorporating environmental factors and mitigative measures identified in IEEs, EAs, and EISs, as appropriate, in the design and the implementation instruments for programs, projects, activities or amendments."

(204.3.4(a)(6))

- **Critical to IP compliance with IEE/EA conditions**
- **BUT: historically, problems in implementation:**
 - Many USAID procurement instruments have NOT adequately addressed environmental compliance
 - Lack of guidance required A/CORs, COs to repeatedly "re-invent the wheel"
 - Partners/contractors fail to budget for environmental requirements

The solution. . .

13

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



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

Step-by-step guidance and boilerplate language

- For RFAs, RFPs, agreements, grants, contracts
- **Optional, not required**
- **ADS Help Document**
- **Approved by General Counsel**

Available from:

www.usaid.gov/policy/ads/200/204sac.pdf

14

The ECL Document Generates:

Best-practice solicitation language

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

Best-practice award language

Requiring that: IP verifies current and planned activities annually against the scope of the RCE/IEE/EA.

The **necessary mechanisms and budget** for IP implementation of IEE/EA conditions are in place.

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

Specifically:

1. Complete **EMMP** exists or is developed.
2. Workplans & budgets integrate the EMMP
3. Project reporting tracks EMMP implementation

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The ECL Strengthens ESDM and ...

Provides cost and efficiency benefits to Mission Staff and Implementing Partners

USAID Staff

Avoids the effort, costs and loss of good will that come from imposing "corrective compliance" measures on IPs after implementation has started.

Reduces USAID cost and effort of environmental compliance verification/oversight by assuring that IPs integrate environmental compliance reporting into routine project performance reporting.

Implementing Partners

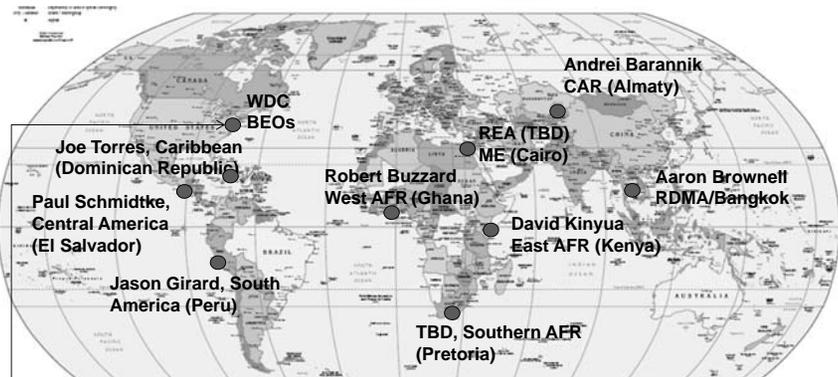
Provides certainty regarding environmental compliance responsibilities

Prevents "unfunded mandates"—USAID requirements to implement mitigation and monitoring after implementation has started and without additional budget.

16

Who Can Help?

MEOs in every bilateral Mission AND the BEOs and REAs:



AFR: Brian Hirsch, Asia & ME: Robert MacLeod, BFS: Walter Knausenberger (acting), DCHA: Erika Clesceri E&E: Will Gibson (acting), E3: Teresa Bernhard, GH: Teresa Bernhard (acting), LAC: Victor Bullen, M/ODP: Dennis Durbin, OAPA: Gordon Weynand

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References & Useful Information



Chapter 11: Livestock



- USAID Environmental Compliance & Related Links
www.usaid.gov/our_work/environment/compliance/index.html
- 22 CFR 216
www.usaid.gov/our_work/environment/compliance/reg_216.pdf
- ADS Series 200 (with link to Chapter 204 & ECL)
www.usaid.gov/policy/ads/200/
- IEE Assistant (help in preparing Reg. 216 documentation)
- Sectoral Environmental Guidelines + many other resources
www.usaidgems.org



18

GEMS Project Services

❖ The GEMS project . . .

- provides tools, resources, technical assistance and capacity building **to strengthen environmental management and environmental compliance**
- serves USAID Missions and partners globally



❖ GEMS services are available. . .

- On a subsidized basis (access via request to REA), or
- Via buy-in to GEMS

For more info consult the GEMS Factsheet

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Session 21.

Bringing Curricula to Reality

Group discussion + individual action planning

Summary

This session will consist of an Action Planning exercise in which participants synthesize key elements of the technical instruction and skill building activities to identify specific ways in which they can advance environmental compliance objectives and the principles of environmentally sound design and management.

Taking Stock: the State of Environmental Compliance in USAID Mission & Projects

This workshop has set out LOP environmental compliance requirements, and how the responsibilities for fulfilling these requirements are allocated among IPs, C/AORs and MEOs. In practice, significant compliance gaps and shortfalls exist. Many of these gaps and shortfalls are rooted in inadequate compliance *systems and processes*.

That is, for compliance to be achieved in practice, it is not enough that individual USAID and IP staff understand their roles and responsibilities and master key skills; internal mission/team and project processes must be in place that support (and require) the exercise of these responsibilities.

In this first part of the session, we will examine the *AFR Best Practice Standard* to better understand the mission processes and capacities required for LOP environmental compliance. (While developed by Africa Bureau, there is nothing about these standards that are region-specific.) This session will consist of discussions and individual planning on “ways forward”—i.e., how to strengthen mission/team and IP/project compliance processes and capacities to improve LOP environmental compliance and better achieve ESDM.

Focus Groups and Individual Action Plans.

Having taken stock of where we are, we are ready to begin to discuss ways forward: how can we and our mission and projects strengthen mission and team compliance processes and capacities to improve LOP environmental compliance and better achieve ESDM?

We will divide into two focus groups: (1) Mission Staff and (2) IPs. (*Note: depending on balance of participant numbers in these two groups, a different grouping may be decided.*) Each group will engage in a facilitated discussion

Focus Group Questions:

- What elements of LOP compliance are well-implemented in your mission/project? Why?
- Have you/your team/the mission/your project implemented compliance strengthening measures you would like to share? Are they working well?
- Key LOP environmental compliance gaps within your team/Mission/project? What are the causes of these gaps?
- Do you see feasible remedies? What are they?
- What do the USAID sector teams (and A/CORs specifically) need to do differently? Do they or the projects need additional resources, support or training to implement these changes?

Plenary “Way Forward” Discussion and Individual Action Plans.

Following the focus groups, we will reconvene in plenary:

- We will begin the plenary session with a short report-out from each group.
- Then, we will have a facilitated discussion to try to reach agreement, as a group, on the following questions:

Assuming that each of us have the opportunity to deliver post-workshop briefings to Mission Management /Sector Team leaders or COPs, what are the key points to convey to prioritize and strengthen LOP environmental compliance? Key recommendations to make?

(Not all points will be applicable to all everyone, but we want to agree on a set of core messages.)

- The last portion of this session will be reserved for development of individual workshop follow-up plans, using the template on the following page. We will ask for volunteers to share some of their follow-up items.

Objective

Survey the Mission and Project compliance processes and capacities required for compliance. Identify key messages to communicate to mission management/sector team leaders (USAID staff) and COPs (IP staff) to prioritize and strengthen LOP environmental compliance.

Develop an individual plan for workshop follow-up to strengthen LOP environmental compliance in your project, team, or mission/operating unit.

Key resources

- *AFR Environmental Compliance Best Practice Standard*
- Environmental Compliance Action Plan template (both provided on the following pages.)

AFR Environmental Compliance Best Practice Standard

| | |
|--|---|
| A) Environmental documents are in place, including: | |
| 1) Environmental Compliance Mission Order | |
| 2) MEO Appointment Memo | |
| 3) Up-to-date ETOA or FAA 118/119, prepared with MEO involvement or review | |
| 4) IEEs at SO level, updated as necessary | |
| 5) IEEs at activity level, updated as necessary (if not included in SO-level IEE) | |
| B) Staff and implementing partners have capacity to ensure environmental compliance: | |
| 1) Staff and implementing partners have been trained in Regulation 216/environmental compliance | |
| 2) MEO has knowledge of country level environmental assessment legislation and country environmental issues | |
| 3) MEO has skills and expertise to identify potential environmental components for Mission SOs and activities; | |
| 4) A “Deputy” or “Alternate” MEO has been appointed to assist when the MEO is unavailable | |
| 5) Opportunities for ongoing training in environmental compliance are provided to staff and implementing partners | |
| C) Processes are in place to ensure environmental compliance: | |
| 1) MEO reports directly to Mission Director or senior management on matters pertaining to compliance with USAID Environmental Procedures | |
| 2) MEO has mission-wide tracking process for IEE status, which is readily available to all mission staff. (BEO request: use Environmental Compliance Status Report format, an example of which is being sent as an attachment.) | |
| 3) MEO and CTOs/Activity Managers have process for collaborating on activities with potential environmental impacts (from design to closure) | |
| 4) Process exists to identify activities that need amended IEEs (not already covered by the SO level IEE) | |
| 5) Process exists for ensuring IEE conditions are incorporated into Request for Proposals/Request for Applications (RFP/RFA), or process exists for ensuring activity-level IEE will be undertaken by the contractor (and included as a task in the RFA/RFP) | |
| 6) Process exists for incorporating IEE conditions into contracts; and including mitigation and monitoring costs into project budgets | |
| 7) Process exists for ensuring mission or implementing partner develops and implements an Environmental Management Plan/Mitigation and Monitoring Plan (EMP/MMP) | |
| 8) Process exists for reporting to USAID on implementation of mitigation measures and continued assessment of potential environmental impacts (in project semi-annual or quarterly reports); | |
| 9) Financial resources available to support mission environmental compliance processes, including training, analytical support, MEO travel to assist CTOs with field monitoring, etc. When the MEO reports to a sectoral team (Economic Growth, etc.), these resources would ideally be provided by the Program Office, since the MEO duties support the mission as a whole. | |
| D) The following mission contracting, project, and review/status documents include environmental compliance language: | |
| 1) Strategic Objective Agreement (SOAg) approvals | 3) Modified Acquisition and Assistance Request Documents (MAARDs) |
| 2) Activity Approval Documents (AAD) | 4) RFPs/RFAs |
| 5) Contracts and cooperative agreements with budget that reflects mitigation and monitoring costs; | |
| 6) Quarterly or semi-annual reports, submitted by project staff to the CTO | |
| 7) Most recent Annual Report submitted by Mission to USAID/W | |
| 8) Portfolio reviews, conducted semi-annually | |
| 9) Closure report, where lessons learned regarding ESDM and Reg. 216 should be documented; and | |



USAID
FROM THE AMERICAN PEOPLE

Life-of-Project Environmental Compliance & Environmentally Sound Design and Management
A Regional Training Workshop for USAID Staff & Partners

INDIVIDUAL WORKSHOP FOLLOW-UP PLAN

With reference to previous discussions in this session, please identify 3-5 follow-up actions that you plan to take after this workshop to strengthen LOP environmental compliance on your project, in your team, or in your mission/operating unit. For each, state a proposed timeline and immediate next step.

Example actions. Actions might include (but are not limited to):

***Mission Staff:** Brief mission management on key messages identified in this session ▪ Brief contracts team on ECL and inclusion of environmental responsibilities clauses in A/COR letters ▪ Require EMMPs for projects for which you are an A/COR ▪ Deliver a short LOP Environmental Compliance Briefing for mission staff ▪ Work with M&E specialist to better assess env.compliance in field visits.*

***IPs:** Brief your COP and M&E lead on key environmental compliance requirements as conveyed by the workshop ▪ Lead an environmental compliance session ion an upcoming staff training ▪ Developing a first-draft EMMP for internal review ▪ Developing a TOR for an external consultant or requesting TA from your home office to assist with EMMP development*

| Action item | Proposed timeline | Immediate step |
|--|----------------------------|--------------------------------------|
| <i>Ex. Lead Environmental Compliance Session in upcoming staff training. (Develop short presentation using slides from this workshop.)</i> | <i>3rd week of January</i> | <i>Contact training coordinator.</i> |
| 1. | | |
| 2. | | |
| 3. | | |
| 4. | | |

Workshop Final Evaluations

Summary

In response to comments received on the previous workshops in this series and in response to evolving AFR/SD programming, a number of changes to agenda and session content were implemented in this workshop. Your feedback is essential to strengthen materials and agenda—and to draw attention to Mission and Program TA and support needs for ESDM and environmental compliance.

Key Resource

Evaluation form (see following)

Workshop Evaluation

Life-of-Project Environmental Compliance and Environmentally Sound Design & Management

A Training Workshop for USAID/Malawi Staff & Implementing Partners

Lilongwe, Malawi ▪ 11 – 15 March, 2013

Your frank and honest feedback will help strengthen future trainings and help prioritize ESDM and environmental compliance support to USAID Programs and Missions in Africa and globally. Thank-you for your time!

Learning approach

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

| Issue | Assessment | | | | Comments | |
|--|---|--|-------------|--|---|--|
| Balance of time in classroom to time in field | Much more time in field needed | A bit more time in field needed | About right | A bit more time in classroom needed | Much more time in classroom needed | |
| In the classroom, balance of presentations to exercises, group work & discussions | Much more emphasis on presentations needed | A bit more emphasis on presentations needed | About right | A bit more emphasis on exercises/ discussions needed | Much more emphasis on exercises/ 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 | | | | | | |
| Field visits | | | | | | |

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 ESDM and USAID's Environmental Procedures 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 <u>knowledge and capabilities</u> to address environmental compliance requirements in the context of your job function/professional responsibilities? | Not at all | Moderately | Strongly | |
| Motivation To what extent has this workshop increased your <u>motivation</u> to <i>proactively</i> address environmental compliance and ESDM in the context of your job function/professional responsibilities? | Not at all | Moderately | Strongly | |

Key topics not covered

| | |
|---|--|
| Were there any topics of key important to you that were not covered/given very limited attention? | |
|---|--|

Support needs

| | |
|---|--|
| Are there particular environmental compliance/ESDM support needs or resources that you require? | |
|---|--|

Additional comments welcome on any topic.

USAID Environmental Compliance & ESDM Training Workshop ■ Lilongwe, Malawi ■ March 2013



USAID
FROM THE AMERICAN PEOPLE

Version: 14 November 2008

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

Download this factsheet at:
www.encapafrika.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.

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*

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.encapafrika.org/tzWorkshop.htm.

¹ For a more detailed discussion of USAID’s Environmental Procedures, see the “USAID Environmental Procedures Briefing for Mission Staff,” available at www.encapafrika.org/meoEntry.htm.

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.



USAID
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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).

| | |
|--|--|
| <p>The project includes a sub-grant fund</p> | <p>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)</p> |
|--|--|

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 contractor/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.

USAID Environmental Procedures Briefing for USAID/XXX Staff

Contents

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Attachments:

1. *Environmental Compliance Language for Use in Solicitations and Awards*
2. *Annotated Environmental Mitigation and Monitoring Plan (EMMP) Template*

Acronyms

| | | | |
|-----|---|----------|---|
| ADS | Automated Directives System | EMMP | Environmental Mitigation & Monitoring Plan |
| BEO | Bureau Environmental Officer | ESDM | Environmentally Sound Design and Management |
| CFR | Code of (US) Federal Regulations | IEE | Initial Environmental Examination |
| CTO | Cognizant Technical Officer | LOP | Life-of-Project |
| EA | Environmental Assessment | MEO | Mission Environmental Officer |
| ECL | Environmental Compliance Language for Use in Solicitations and Awards (ADS 204 help document) | PMP | Performance Monitoring Plan |
| EIA | Environmental Impact Assessment | 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 supersede the statutory, regulatory and ADS language that governs and constitutes these procedures. This language may be accessed via <http://www.encapafrika.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.encapafrika.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.encapafrika.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 USAID/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.encapafrika.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 |
|--|--|
| <p>Prepare Reg 216 environmental documentation.</p> <p>Reg 216 documentation includes:</p> <ul style="list-style-type: none"> ✓ Requests for Categorical Exclusions (RCEs) ✓ Initial Environmental Examinations (IEEs) ✓ Environmental Assessments (EAs) ✓ Amendments to all of the above | <p>CTO/Activity Manager (MEO reviews/provides advice).</p> <p>EXCEPT:</p> <ul style="list-style-type: none"> ✓ Teams may engage partners or outside contractors to prepare IEEs under the supervision of the CTO/Activity Manager. <u>The use of external expertise is RECOMMENDED for complex programs and activities.</u> ✓ EAs are almost always prepared by 3rd-party contractors. ✓ Title II IEEs are prepared by Implementing Partners as part of their MYAP submissions. |
| <p>Approve and Clear Reg. 216 Documentation.</p> | <p>All of the following must clear:</p> <ul style="list-style-type: none"> ✓ CTO, Activity Manager or Team Leader ✓ MEO ✓ Mission Director ✓ Bureau Environmental Officer |
| <p>Clear sub-project/sub-grant Environmental Reviews.</p> | <p>Activity Manager AND MEO</p> <p>(Activities identified by the sub-project/sub-grant screening process as “high risk” are forwarded for REA & BEO review and clearance.)</p> |
| <p>Incorporate environmental compliance requirements into procurement documents.</p> | <p>CTO/Activity manager (MEO assists.)</p> |
| <p>Ensure Reg. 216 documentation is current and covers all activities being implemented.</p> | <p>CTO/Activity Manager</p> |
| <p>Assure an EMMP addressing all relevant mitigation and monitoring conditions is</p> | <p>CTO/Activity Manager (MEO may review)</p> |

| 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 <i>if</i> 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.encapafrika.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.encapafrika.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.encapafrika.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.encapafrika.org/meoEntry.htm.

| Mission Environmental Officer | Insert name, email and extension |
|---|--|
| Regional Environmental Advisors (REAs) | East and Central Africa (USAID/EA, Nairobi) <i>David Kinyua: dkinyua@usaid.gov</i> <hr/> Southern Africa R (USAID/SA, Pretoria) <i>Camilien J.W. Saint-Cyr: csaint-cyr@usaid.gov*</i> West Africa (USAID/WA, Accra) <i>Bob Buzzard: robuzzard@usaid.gov</i> |
| Bureau Environmental Officers (BEOs; Washington, DC) | Bureau for Africa (AFR/SD) <i>Brian Hirsch: bhirsch@usaid.gov</i> Bureau for Economic Growth, Agriculture & Trade Bureau (EGAT): <i>Joyce A. Jatko: jjatko@usaid.gov</i> Democracy, Conflict and Humanitarian Assistance (DCHA): <i>Erika Clesceri: eclesceri@usaid.gov</i> Global Health (GH/HIDN) <i>Theresa Bernhard, tbernhard@usaid.gov</i> |



Review DRAFT: 22 July 2011

Download this factsheet at:
www.encapfrica.org/meoentry.htm
[see mitigation and monitoring topics]

To submit comments or for more information, email
the ENCAP core team at:
encapinfo@cadmusgroup.com

ENCAP FACTSHEET
ENVIRONMENTAL MITIGATION &
MONITORING PLANS (EMMPs)

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(M&E) Officers, and consultants who may be engaged to develop EMMPs for USAID projects in Africa.

2. WHAT IS AN EMMP?

An EMMP is a document that sets out:

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

I. INTRODUCTION

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

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

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

This factsheet describes the EMMP concept and its role in life-of-project environmental compliance for USAID-funded activities. It provides practical guidance and examples to inform EMMP development. It is intended for IPs, A/COTRs, MEOs, Monitoring and Evaluation

USAID's Environmental Procedures

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

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

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

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

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

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

3. WHY EMMPs?

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

An IEE for a water and sanitation project may require that wells and latrines be sited “consistent with good practices.”

The EMMP would specify the site-specific standards that the project must follow, e.g., wells must be located at least 50 meters from any pesticide or chemical store, and 25m from any cesspool, leaching pit, septic field, latrines, poultry yards, or livestock watering point..

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

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

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

4. HOW ARE EMMPs REQUIRED?

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

- Increasingly, contracts and awards specifically require that an EMMP be developed and implemented. (This is part of a broader trend within USAID to use “best practice” environmental compliance language in solicitations and awards.)
- Most recent and all new sector-level IEEs (e.g. an IEE covering a Mission’s health or economic growth portfolio) require that an EMMP will be developed for each individual project.
- For new project-level IEEs, the BEO will typically require that an EMMP be submitted as part of the

IEE. If not, the IEE will require that the EMMP be submitted with the project workplan or performance management plan (PMP).

- For projects conducted under older IEEs, A/COTRs can issue technical direction requiring EMMPs.

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

5. EMMP FORMATS

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

EMMP for Project XXX

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

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

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

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

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

6. STEPS IN EMMP DEVELOPMENT

EMMP development consists of 5 basic steps.

1. Review the governing IEE or EA to understand the conditions that apply to your project.
2. Translate IEE or EA conditions into specific mitigation actions.
3. Specify monitoring measures.
4. Specify timelines and responsible parties.
5. Determine who will have overall responsibility for EMMP implementation/environmental compliance.

Each is addressed below.

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

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

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

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

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

2. Translate IEE conditions into specific mitigation actions.

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

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

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

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

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

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

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

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

- a. *No construction permitted in protected areas or relatively undisturbed ecosystem areas.*
- b. *Construction & facilities operation may not result in significant adverse impacts on ecosystem services*

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

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

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

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

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

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

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

The EMMP examples in the Annex illustrate this issue.

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

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

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

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

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

3. Specify Monitoring Measures.

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

The EMMP should specify monitoring that will ascertain BOTH:

- (1) whether mitigation was implemented.
- (2) whether mitigation was sufficient and effective.

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

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

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

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

4. Specify timelines and responsible parties

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

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

overseeing EMMP implementation. (See immediately below).

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

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

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

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

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

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

7. PITFALLS TO AVOID

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

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

8. EMMPs & ENVIRONMENTAL COMPLIANCE REPORTING

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

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

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

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

Environmental Compliance and Project Core Performance Indicators

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

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

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

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

9. EMMP REVIEW AND APPROVAL

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

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

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

10. IMPLEMENTING EMMPs

Experience shows that systematic EMMP implementation requires:

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

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

Environmental compliance monitoring should be a workplan item.

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

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

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

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

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

II. ENCAP RESOURCES FOR MITIGATION AND MONITORING DESIGN

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

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

ACRONYMS

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

ANNEX: EMMP EXAMPLES

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

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

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

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

EXAMPLE 1: THE HEALTH IMPROVEMENT PROGRAM (THIP)

THIP Activity 1:

Prepare strategies and action plans to increase the import and internal distribution of pharmaceuticals

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

| IEE Condition | Specific mitigation actions to implement the condition | Person responsible for implementing mitigation Timing | How implementation will be verified (monitoring indicator) Responsible party & Timing |
|---|--|--|--|
| Contractor shall provide advice for safe storage and disposal of expired pharmaceuticals. | In all strategies and action plans for which THIP provides assistance, include measures for: <ol style="list-style-type: none"> a) storage in accordance with labels; b) disposal of expired and unused pharmaceuticals; and c) a budget to implement these safeguards. | <i>Responsible Party:</i> THIP Policy Technical Advisors <i>Timing:</i> During preparation phase of all strategies and action plans | Review of all strategies and action plans to ensure they include information about safe disposal of pharmaceuticals and a budget <i>Responsible Party:</i> THIP Policy Director <i>Timing:</i> During preparation of drafts and final documents |

THIP Activity 2:

Procure pharmaceuticals from US companies.

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

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

THIP Activity 3:
Train healthcare workers on use of new medical procedures.

Potential Environmental Impact: As an indirect result of training, healthcare waste (HCW) will be generated. If not collected and disposed of safely, aquatic and terrestrial resources and human health could be adversely affected

| IEE Condition | Specific mitigation actions to implement the condition | Person responsible for implementing mitigation Timing | How implementation will be verified (monitoring indicator) Responsible party & Timing |
|--|---|---|---|
| Training of healthcare workers should include best practices in disposal of HCW as described in the EGGSAA Healthcare Waste chapter: | <p>Training courses should incorporate the following items, which should be included in all training on implementing new medical procedures:</p> <ul style="list-style-type: none"> ▪ How to Prepare an HCW Plan ▪ Developing a Waste Segregation System ▪ Minimize, Reuse, Recycling Procedures ▪ Incorporating Good Hygiene Practices | <p><i>Responsible Party:</i> Training Advisor</p> <p><i>Timing:</i> When course material is being developed; when training is delivered</p> | <p>Course material includes these topics; when course material is developed; M & E Advisor</p> <p>Trainings include these topics; when trainings are delivered; M & E Advisor</p> |

EXAMPLE 2: AGRICULTURAL SERVICES PROJECT (ASP)

ASP Activity 1:
Training Ministry of Agriculture extension officers to provide sound crop production advice to ASP-supported farmers

Potential Environmental Impact: MOA extension officers could provide advice to farmers which results in expansion of agricultural land into natural areas; or that results in the unsafe use of pesticides.

| IEE Condition | Specific mitigation actions to implement the condition | Person responsible for implementing mitigation Timing | How implementation will be verified (monitoring indicator) Responsible party & Timing |
|--|---|--|---|
| Training shall not result in direct or indirect effects on the environment. | <p>Training of MOA extension officers shall incorporate conservation agriculture; information on ecosystem services; and measures to minimize impacts to natural ecosystems.</p> | <p><i>Responsible Party:</i> ASP Crop Production Specialist</p> <p><i>Timing:</i> Curriculum Development; During trainings</p> | <p>Review of curricula; attend various trainings</p> <p><i>Responsible Party:</i> ASP Training Officer</p> <p><i>Timing:</i> At time curricula are being developed; when trainings are provided</p> |
| Trainings shall not recommend pesticides without first preparing a PERSUAP that is approved by the Bureau Environmental Officer. | <p>Note: these mitigation measures are from the PERSUAP approved by the BEO on [xxx date]:</p> <ol style="list-style-type: none"> 1) Only PERSUAP-approved pesticides shall be included in training for extension officers. 2) Trainings shall include safeguards for health and safety of workers, and measures to protect the environment (Annexes A and B of the PERSUAP). 3) Trainings shall include monitoring the efficacy of pesticides as described in Annex C of the PERSUAP. | <p>ASP Crop Production Specialist</p> <p>During trainings</p> | <p>Review of curricula; attend various trainings</p> <p><i>Responsible Party:</i> ASP Training Officer</p> <p><i>Timing:</i> At time curricula are being developed; when trainings are provided</p> |

EXAMPLE 3: SMALL FACILITIES CONSTRUCTION PROJECT (SFC)

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

IEE Condition 1: Siting Requirements for New Construction

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

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

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

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

IEE Condition 2: Design Requirements for Small Facilities

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

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

| Required Design Elements—Training and Community Centers | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|--|---|---|---|---|---|---|-------------------------------|
| A. Latrine/septic tank design prevents in-and-out access for insects or other disease vectors from the pit or holding tank. B. Latrines are accompanied by handwash stations. C. All sources of gray water (kitchen sinks and handwash stations) discharge to either (1) a seepage pit or sump at least 15m from any source of groundwater or surface water tapped for domestic use, or (2) to an impermeable pump-out tank. D. Latrines or the terminus of any septic leach field must be at least 30m from any source of shallow groundwater or surface water tapped for domestic use, OR discharge to an impermeable pump-out tank. E. Siting, grading and/or drainage structures prevent runoff from the compound from creating standing water on the compound or adjacent land during the rainy season (instances of generalized flooding excepted.) F. Septic pump-out point, if any, shall feature a concrete apron and drain with return to the septic tank. G. Concrete aprons with berms or gutters/sumps shall be placed under generators, fuel storage, and fuel pump-in point (if different) sufficient in each case to capture at least a 20 liter spill. | | | | | | | | | | | | | | | |
| Site | Incorporated in Final Technical Specifications? (Y/N; reference to list above) | | | | | | | Built as-specified? (confirmed by field inspection) (Y/N; reference to list above) | | | | | | | Notes (issues and resolution) |
| | A | B | C | D | E | F | G | A | B | C | D | E | F | G | |
| | | | | | | | | | | | | | | | |

