



USAID
FROM THE AMERICAN PEOPLE



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

Morning Session

AOR/COR Field-based Training - Juba, South Sudan – 24 June 2013

GEMS Environmental Compliance-ESDM Training Series
Africa-Asia-Latin America-Middle East 2012-2013

Session Objectives

- Define “environment”
- Give at least two examples of how the environment affects development needs & USAID programming, and how development affects the environment
- State the origins of and statutory/regulatory basis for USAID’s environmental procedures
- State the key compliance requirements established by the procedures over life-of-project
- State at least two reasons why USAID’s environmental compliance procedures are necessary

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.

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Question:

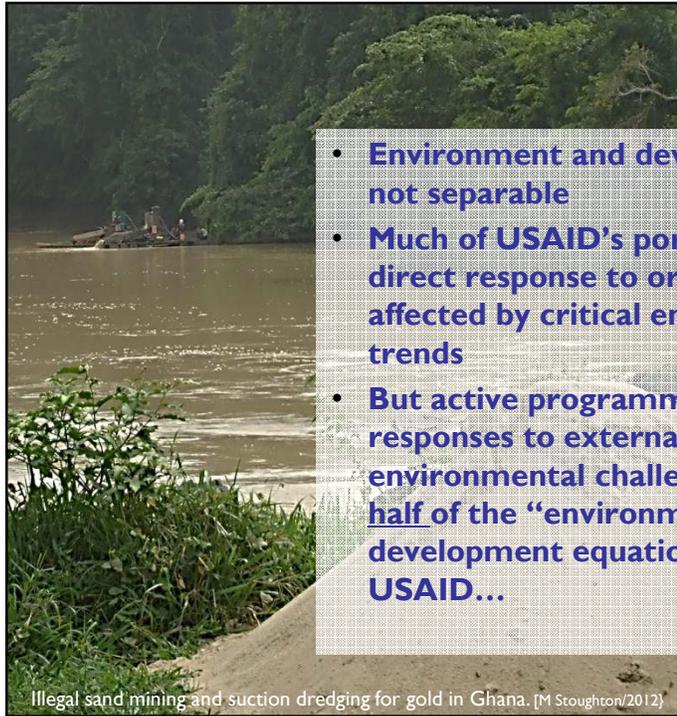
Relationship between Environment and Development



What examples can you give of development programs or projects that have been affected by the environment?

What examples can you give of where the environment has been affected by development programming?

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- **Environment and development are not separable**
- **Much of USAID’s portfolio is a direct response to or directly affected by critical environmental trends**
- **But active programmatic responses to external environmental challenges are only half of the “environment and development equation” for USAID...**

Illegal sand mining and suction dredging for gold in Ghana. [M Stoughton/2012]

The other half of the “environment and development equation” for USAID...and our focus.

USAID has mandatory life-of-project environmental procedures to limit adverse impacts of USAID development activities on ecosystems, environmental resources and environmental quality—particularly as they affect human health and livelihoods.



Fires to prepare land for planting in SE Asia create a huge regional smoke plume.
Image: NASA

Origin & mandate of USAID's environmental procedures

An "environmental failure"

1974

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

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

5 died.



First a court mandate

Then a mandate in law:



§117 of the FAA requires that USAID:

utilize an Environmental Impact Assessment (EIA) process to:

"fully take into account the impacts of [its] programs and projects upon the environment and natural resources"

of host countries prior to implementation.

1975

Sued by US NGOs for non-compliance with NEPA, USAID settled out of court, agreeing to develop environmental safeguard procedures.

Where are the procedures found?

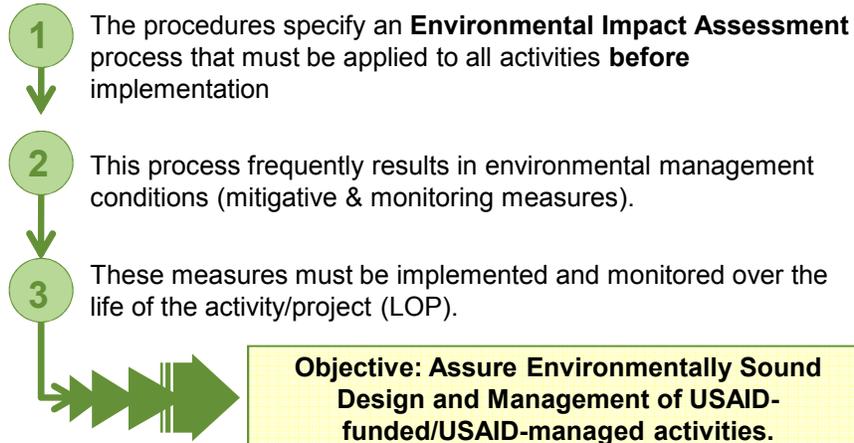
USAID's Environmental Procedures are the response to these mandates. They consist of:

- **Federal regulations:** 22 CFR 216 ("Reg. 216") and
- **Mandatory Agency Policies** as set out in USAID's Automated Directives System (ADS), (especially--but not only--201.3.11, 202.3.6, 204 & 303)

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



What do the procedures require? (the big picture)



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

1. Environmental considerations must be taken into account in activity planning.
 2. No activities implemented without **approved Reg. 216 environmental documentation.**
 3. Any resulting environmental mitigation and monitoring conditions are:
 1. Written into award instruments.
 2. Carried out by the implementing partner, and this implementation is monitored
- The output of the EIA process specified by 22 CFR 216***
- USAID monitors via field inspections and review of routine project reports submitted by IPs. To make this possible, project reporting by IPs must provide an auditable record of environmental compliance.**

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What do the procedures require? (cont'd)

4. Environmental compliance is assessed annually as part of formal Mission (operating unit) reporting.
5. Environmental compliance documentation is maintained by the Mission & each sector team

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

In contrast to gender and general sustainability assessment, pre-implementation environmental review is required by law and regulation, not just Agency policy.

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Overview: Roles & Responsibilities

USAID

Assures Reg. 216 documentation in place.

Establishes/approves environmental mitigation & monitoring conditions.

Oversees compliance with these conditions, a core part of AOR/COR responsibilities.

Implementing Partners

Implement environmental management conditions established in Reg. 216 documentation.

Report on implementation to USAID.

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Why be so formal?

Don't we know enough about development that we will "get things right" without a formal environmental review/compliance process?

And why worry in the case of smaller-scale activities anyway?

Getting things right isn't so easy, even when the issues are clear...







KOH (highly corrosive) in jar

30+ yr-old obsolete USAID-branded pesticides (found during 2003-2004 FAO Survey). Proper disposal starts at \$3,000 to \$5,000 per ton. Costs rise for highly toxic pesticides. Costly site cleanup also needed after the barrels are removed

Getting things right is even harder when cause and effect are complicated

As

Photo: UNESCO-IHE

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

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

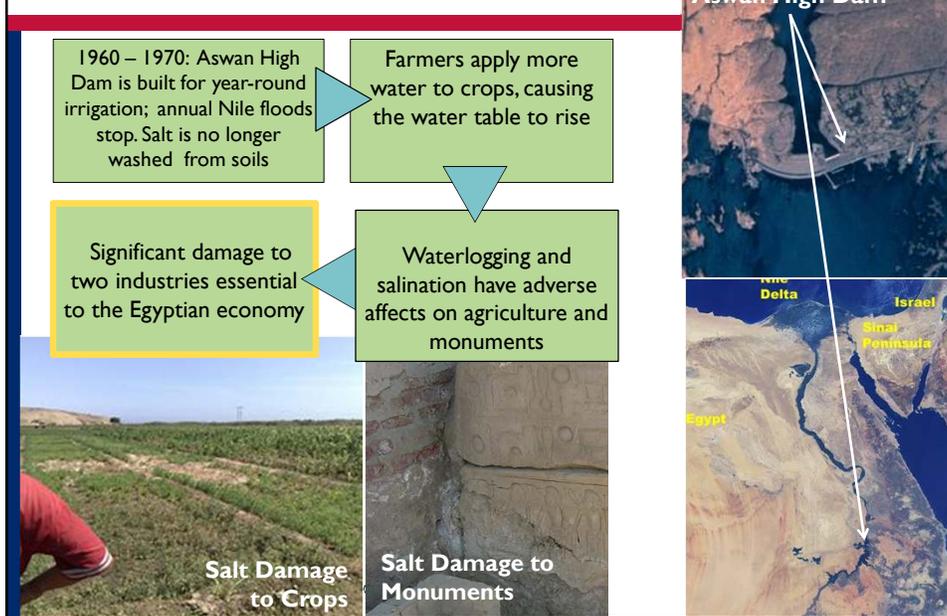
Ponds provided a source of organic carbon which settles to bottom of pond, seeps underground and is metabolized by microbes

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

ental Compliance □ USAID/Southern Africa 18

And in environment and development, things are often complicated ...



Bottom line: in development, there are numerous pathways for environmental failure



Failure to implement the most basic good housekeeping practices (first examples)

Failure to understand system complexity (as we just saw)

And many others, e.g.:

- Designing for average conditions, not expected variability
- Failure to plan for the effects of increased scale

Designing for average conditions, not expected variability

Global change will affect both average conditions & expected variability



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

Why? Strong winds ripped the aluminum sheet roofing off the donor-funded "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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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)

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Finally, small-scale is not small impact!

- **Myth:**
“Environmental impacts of small-scale activities are negligible”
- **Reality:**
Impacts of a single poorly designed/implemented small-scale activity may be small in absolute terms
 - But local impacts to people and communities can be very significant
 - If small-scale activities are numerous, together they can have significant cumulative impacts.



Potable water supply near hospital morgue



Total failure of latrines to contain pathogens

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The bottom line: yes, we do need a formal, systematic environmental compliance process!



USAID’s environmental procedures are a life-of-project process for

- Avoiding environmental failures
- Maximizing environmental benefits

In short, for achieving **environmentally sound design & management (ESDM)**

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**Now:
a closer look at
environmental compliance
during project design**

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Environmental Compliance Process Overview

Environmental considerations integrated in early project design



Pre-implementation EIA process (22 CFR 216)



Results in Reg 216 documentation

*Request for Categorical Exclusion, Initial Environmental Examination (IEE), Environmental Assessment (EA)
must be approved by Mission Director, Bureau Environmental Officer*



**Implementing Partner (IP) Compliance with IEE/EA conditions
required by contracts, agreements**



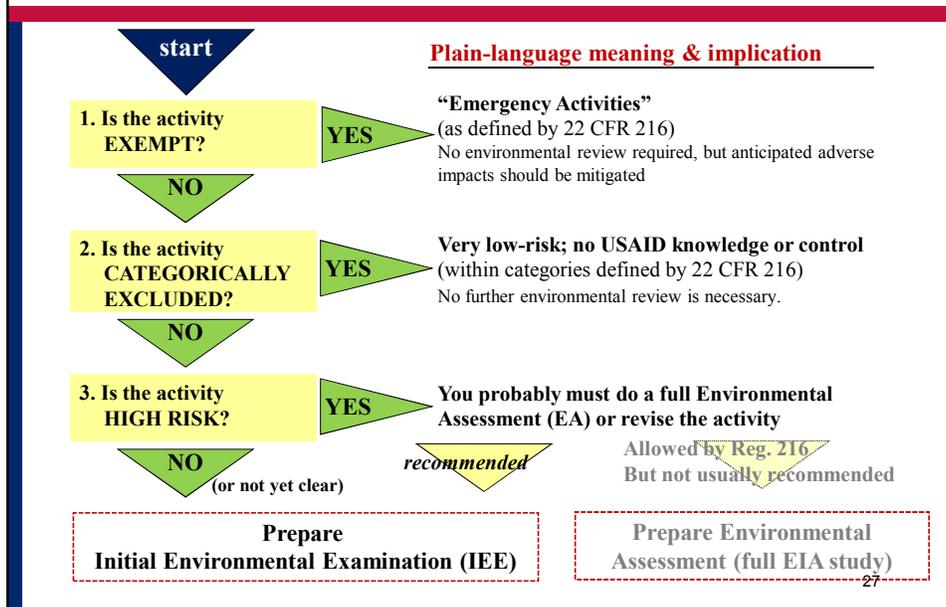
IP implements these
conditions & remains within
the scope of approved Reg 216
documentation



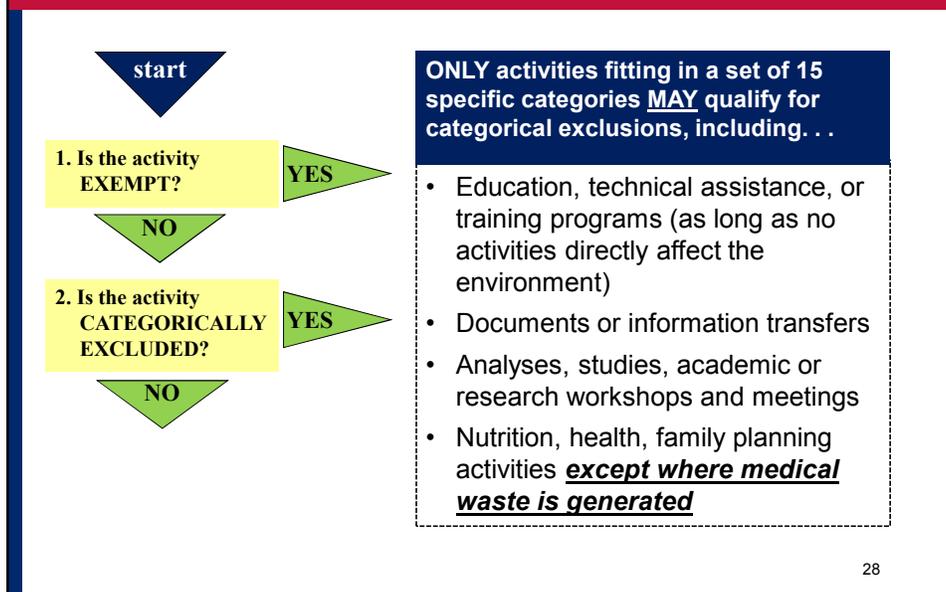
AOR/COR monitors compliance &
**modifies or ends activities NOT in
compliance**

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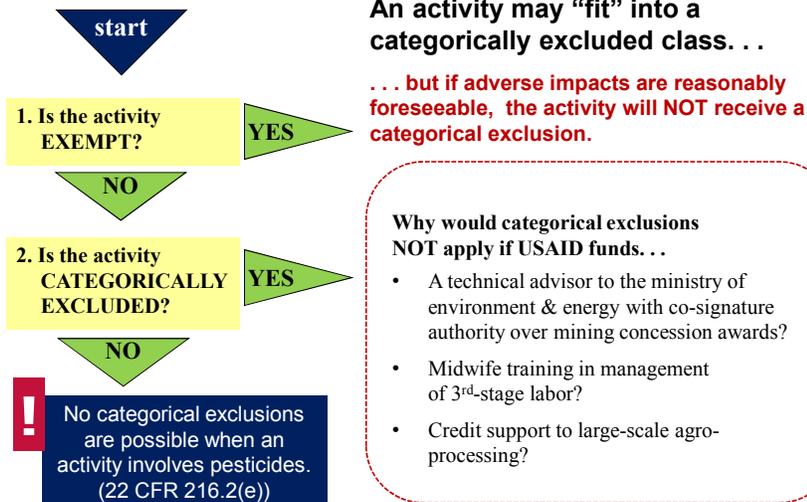
Screening under Reg. 216



Screening under 22 CFR 216: Categorical Exclusions

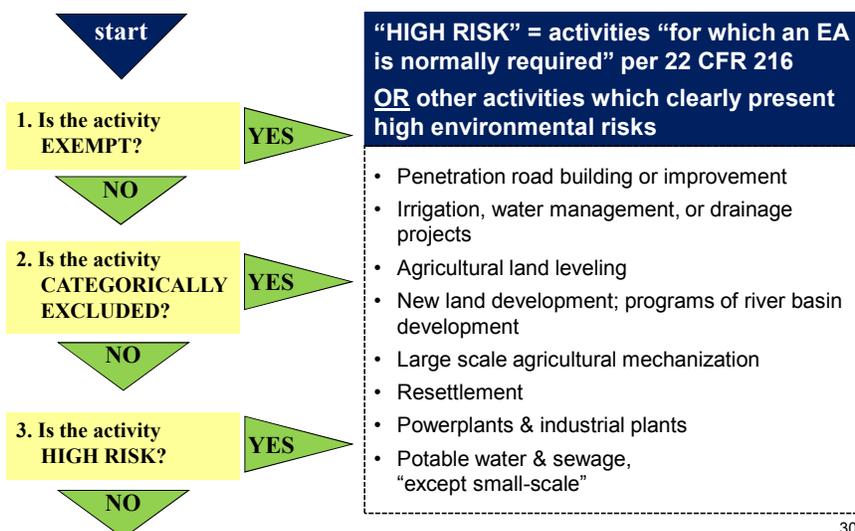


Categorical Exclusions: LIMITATIONS



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Screening under 22CFR216 “High Risk” (EA Likely Required)



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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

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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.

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**Now:
a closer look at
environmental compliance
during project implementation**

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Environmental Compliance Process Overview

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**Implementing Partner (IP) Compliance with IEE/EA conditions
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Environmental Compliance in Project Implementation =

- 1 IP implements IEE/EA conditions & remains within the scope of approved Reg 216 documentation
- 2 AOR/COR monitors compliance & modifies or ends activities NOT in compliance

Compliance requires that:

1. Contracts and awards require compliance with IEE/EA conditions
2. Environmental Mitigation and Monitoring Plan (EMMP) exists
3. EMMP is integrated in workplans & budgets
4. IP reports on environmental compliance as a normal part of project performance reporting
5. Environmental compliance is evaluated in USAID field visits.

Let's look at each in turn

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1. Contracts and awards require compliance with IEE/EA conditions

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 "reinvent the wheel"
 - Partners/contractors fail to budget for environmental requirements

The solution. . .

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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: 05/19/2018
Responsible Office: EC&AT
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](http://www.usaid.gov/policy/ads/200/204sac.pdf)

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The Environmental Compliance Language tool 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 &
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 Environmentally Sound Design & Management, and . . .

Provides cost & efficiency benefits to both Mission Staff & 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 env compliance verification/oversight by assuring that IPs integrate environmental compliance reporting into routine project performance reporting.

Implementing Partners

Provides clarity regarding environmental compliance responsibilities

Prevents “unfunded mandates”—USAID requirements to implement M&M after implementation has started & without additional budget.

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2. Environmental Mitigation and Monitoring Plan (EMMP) exists

An EMMP:

- (If needed) TRANSLATES IEE conditions into specific mitigation measures to implement IEE/EA conditions
- SETS OUT indicators/criteria for monitoring implementation & effectiveness of mitigation
- ESTABLISHES Timing & responsible parties
- Usually in table form. Formats are usually flexible.

40+ yrs of EIA experience worldwide tells us: NO EMMP = No implementation

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Monitoring: Part 1

1. Determining whether mitigation is being implemented as required

This includes quantifying mitigation:

- How many staff trained?
- How many trees planted?

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

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Monitoring: Part 2

2. Determining whether mitigation is working

= Systematic observation of key environmental conditions. . .

Example: a road project may lead to stream sedimentation. Stream turbidity is monitored.

(1) that correspond to impacts & mitigation measures and/or

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

(2) upon which the project depends for its success

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Examples of simple environmental indicators

Measuring erosion



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



Surface contamination by sewage



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



What are the limitations of this indicator?

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EMMPs: Simple in concept

Basic EMMP template

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 I: **[name of activity]**

[briefly describe activity & summarize potential adverse environmental impacts—from IEE]

IEE or EA Condition (reproduced 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's activity and implementation actions self-evident, this "translation step" can be omitted) A single IEE/EA condition may require multiple action to implement—add rows as necessary	Monitoring How will the project verify that the mitigation action 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]

Introduction to EMMPs. Visit www.encapafrika.org.



Let's practice

In small groups, take 15 minutes to begin to “translate” these IEE conditions into specific, implementable, monitorable mitigation actions. Bullet out results. Make any assumptions needed regarding the project context.

Translating IEE Conditions to Actions. 47



Health Services Capacity & Policy
“Capacity-building and policy development support to public health delivery & management systems must involve all practicable efforts to assure that these systems address and support proper waste management (including handling, labeling, treatment, storage, transport and disposal of medical waste).”

Direct Financial or Technical Assistance to Agroprocessing Enterprises
“Existing enterprises/facilities receiving direct USAID support will be reviewed to identify any significant environmental management deficiencies and these deficiencies promptly corrected.”

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

Translating IEE Conditions to Actions. 48

Question:

**How are
EMMPs
required &
approved?**



EMMPs are not required by 22 CFR 216, but they are required by almost all newer IEEs in Africa.

Requirement implemented by any of three mechanisms:

1. Technical direction from C/AOR
2. Required by contract/agreement

Generally approved by: COR/AOR

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3. EMMP is integrated in workplans & budgets



EMMPs are only as good as their implementation.

Implementation requires funds
→ must be provided for in project budget

Implementation requires planning
→ can't be left out of the workplan.

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4. IP reports on environmental compliance as a normal part of project performance reporting

Preparing “an auditable record” of compliance

For simpler projects,

If the EMMP contains a “monitoring record” section, the EMMP with current monitoring results can simply be appended to the quarterly report.



For large projects with complicated EMMPs,

a text summary/short analysis of EMMP implementation is needed.

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“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.

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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. . .



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Bringing env. issues into results framework

EXAMPLE: Food for Peace

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

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

~30,000 MT of firewood/yr

Mitigation:

Improved 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



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5. Environmental compliance is evaluated in USAID field visits.

AORs, CORs and M&E specialists must use field visits to field-check compliance

Standard field visit report forms should have an environmental compliance section



Field inspection. . .

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



5. Environmental compliance is evaluated in USAID field visits.

Not an environmental specialist? Take along a **Visual Field Guide.**

www.encapafrika.org/egssaa.htm



Version: 1 December 2009
download at www.encapafrika.org/egssaa/water.htm
comments and corrections to encapafrika@contractors.com

ENCAP Visual Field Guide: WATER SUPPLY for quick identification of serious environmental concerns in small-scale water supply activities

About the ENCAP Visual Field Guide Series
ENCAP Visual Field Guides are intended for use during field visits by USAID and implementing Partner staff who are not environmental specialists. They are intended to ensure that the most common serious environmental deficits in activity design and management are quickly and easily identified for corrective action.

Note that an activity may be subject to environmental design and management conditions specified in its Environmental Assessment or Initial Environmental Examination but not captured in this document. The field guides complement the more detailed guidance found in USAID's Environmental Guidelines for Small Scale Activities in Africa.

Consult the Guidelines for guidance regarding procedures, mitigation and corrective actions. The Guidelines are available at www.encapafrika.org/egssaa.htm.

Problems: This field guide was prepared by The Cadmus Group, Inc. for International Resource Group, Ltd. (IRG) under USAID/Africa Bureau's Environmental Compliance and Management Support (ENCAP) Program. Contract Number DFFI-00-01-00014. Field Order No. 11. Its contents are the sole responsibility of the authors and do not necessarily reflect the views of USAID or the United States Government.

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 uncovered?	Issue: Easily results in contamination of water with pathogens. Can provide breeding habitat for disease vectors, including mosquitoes. (Photo depicts uncovered well.)
YES	
NO	
2. Is there stagnant water around the water supply point?	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 contaminate water in the well.
YES	
NO	
3. Do livestock share the water supply point?	Issue: Easily results in contamination of water with livestock feces & body fluids. May attract disease vectors (particularly flies) which are themselves a source of contamination.
YES	
NO	
4. Is there soil erosion in the vicinity of the water supply point?	Issue: Soility reduces the service period of the supply point by undercutting concrete casings, well covers, and pump footings. Often leads to stagnant water around the supply point (see question 2, above).
YES	
NO	

(over)

References & Useful Information

- USAID Environmental Compliance & Related Links
www.usaid.gov/our_work/environment/compliance/index.html
- 22 CFR 216
www.usaid.gov/our_work/environment/compliance/reg216.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



SECTORAL ENVIRONMENTAL GUIDELINES
Chapter 11: Livestock
AUGUST 2012



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