



# Environmental Mitigation & Monitoring Plans (EMMPs)

# **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

# Congratulations...

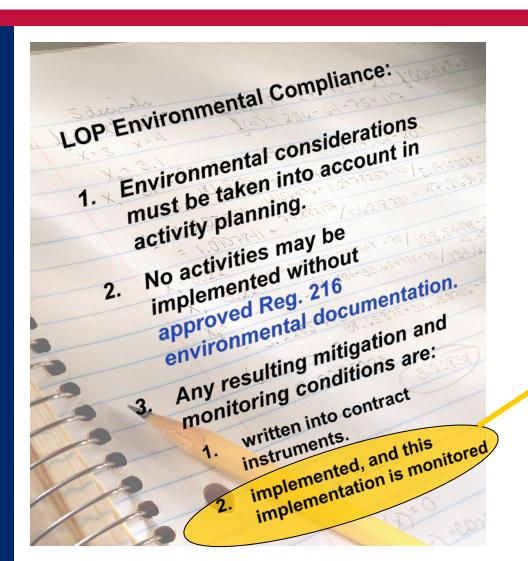


You are supporting improved education, governance, health and economic opportunity in the Middle East Region!

- Now, we must marry development programming with sound environmental management at the project level
  - IEEs (and EAs) are useless unless the conditions—environmental management criteria—they establish are implemented!
  - USAID Environmental Procedures therefore require implementation



# **USAID** requirements are specific



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

### What does the ADS say?

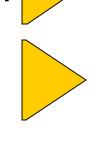
Team Leaders and Activity
Managers or COR/AORs must
actively manage and monitor
compliance with any IEE/EA
conditions, modifying or ending
activities not in compliance.
(ADS 202.3.6, 204.3.4 and 303.2.f



## Implementation of IEE/EA conditions

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

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



EMMPs are critical.

What are they?

<sup>\*</sup>Except Title II partners, who write their own IEEs.

## 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 and effectiveness
- Who is responsible for mitigation and monitoring

Carry over from the IEE only those activities with conditions (e.g., "negative determination with conditions")

To determine if mitigation is in place and effective

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

For mitigation, and for monitoring and reporting.

(may differ)



Activity	Adverse Impacts	Mitigation Measure	Monitoring Indicators/ Criteria	Monitoring & Reporting Schedule	Responsible Party(ies)
	Ва	asic EMN	/IP templ	ate	

If well specified, excerpt directly from the IEE;
If not well specified in IEE, define in better detail

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



### The EMMP: a flexible tool

# More sophisticated EMMP formats can include:

- 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?

# 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."





### EMMPs build on standards & best practice

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

**Host-country standards** 

### 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



**Sphere standards** 

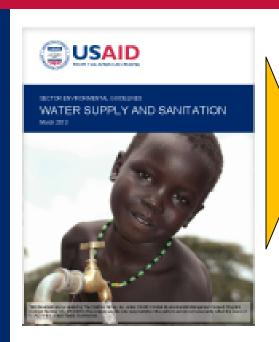


Sector Environmental Guidelines





# 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
- I5m 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:

# 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
- realistic, given that the project will not have direct control over these systems

# How are EMMPs being required?

#### Three mechanisms:

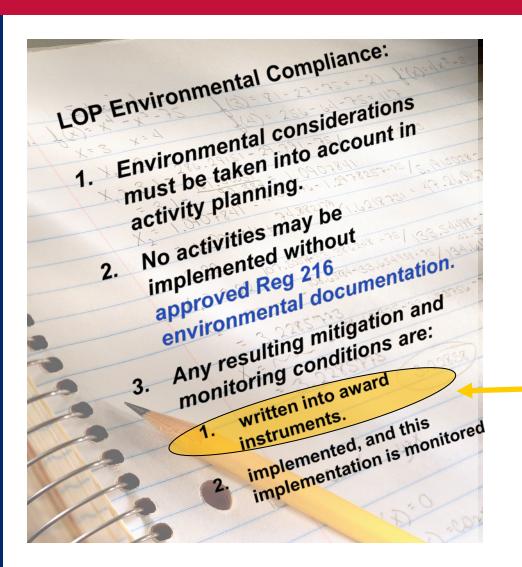
- Technical direction from COR or AOR
- 2. Required by contract/agreement

More about this ...

- 3. Required by DFAP guidance (Title II only)
- 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



# **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)

# Current best practice exceeds requirement

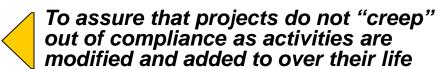
USAID is increasingly using best-practice environmental compliance language that goes beyond the ADS minimum

# New awards and significant modifications are requiring that:

- 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.



#### Specifically:

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



# Source of best-practice language

# Environmental Compliance: Language for Use in Solicitations and Awards ¶

The following recommended language is for use by Cognizant Technical Officers (CTOs), Activity. Managers, Contracting Officers (COs), Mission Environmental Officers (MEOs), Program Officers, Bureau Environmental Officers (BEOs), and other USAID staff involved in solicitations, awards, and \*ABOUT-THIS-LANGUAGE¶

Its purpose is to ensure adequate time is provided for environmental review and that environmental. ats purpose is no ensure accounce is provided for approved environmental impact assessment documentation. activity design and management. are incoporated in the design and approval of each program and activity before the Operating Unit, Team, Activity Manager or CTO makes an irreversible commitment of resources for the program or activity. It also is intended to help improve application of USAID's environmental procedures (22 CR) activity. Transo is intended to their improve application of the second of activities, projects.

2.16 or Regulation 21 (1) to create more sustainable and successful implementation of activities, projects.

- ■→ By explicitly enumerating the environmental compliance responsibilities of project implementers. use of this recommended language can help ensure that environmental compliance requirements stemming from the Regulation 216 process are fully integrated into project designs, workplans, and programs. ¶
  - Use of the language also alerts USAID staff and implementing partners early on to the need for a budget to implement environmental compliance measures and to the importance of providing

Available from: www.usaid.gov/policy/ads/200/204sac.pdf

# 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 is use being strongly encouraged

## 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

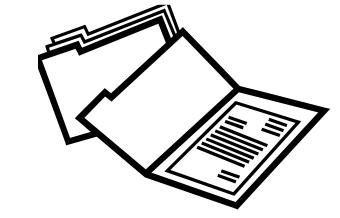
Prevents "unfunded mandates"—
requirements to implement
mitigation and monitoring after
activity has commenced and
without additional budget.



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.

## 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 DFAP IEEs)
- Sometimes additional review by the MEO or REA







### **WASH Rehabilitation**

### **PROJECT BRIEFING:**

**Utilize abandoned borehole** 

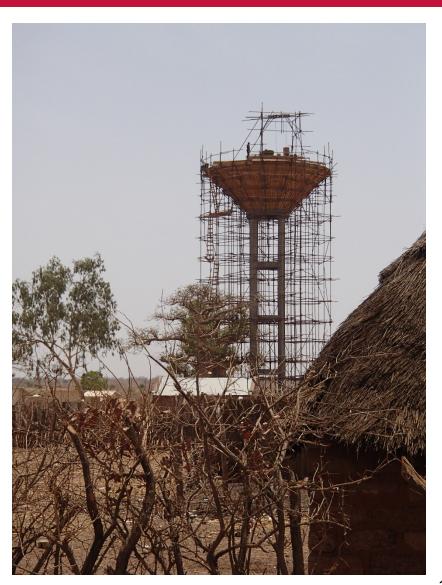
Refurbish existing 20m water tower (volume = 150m<sup>3</sup>)

34 km of new water line to connect 11 villages

Each village to have 1 – 2 public fountains for water collection

No other readily available dry season water source in selected villages

Water provision to be coupled with latrine construction



### **WASH Rehabilitation**

### **PROJECT BRIEFING:**

Soil is sandy and rocky with good drainage

Hydrology surrounding borehole is uncertain; source was previously use for road construction

No irrigated agriculture in region; livestock prevalent

Some seasonal wetlands nearby; no protected areas

Water committees present in some villages



### **WASH Rehabilitation**



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

### **PROJECT BRIEFING:**

Easy access to borehole and water tower along main highway

Latrine construction will use standardized design

Some conflict over water access/rights in region, particularly with passage of nomadic families

Some villages growing as regional capital draws workers.



# EMMP example: WASH Rehabilitation

# Excerpt of Impacts/Baseline Issues and IEE/EA conditions

Sub-Activity or Component	Potential Adverse Impact(s)	IEE/EA Condition(s)			
Borehole restoration	Uncertain water quality—does water contain avy metals or other contaminants?	Water quality testing will be completed prior to construction and at regular intervals thereafter and will conform to USAID and host-country standards			
V	in vell—is lining intact and is it proper	Pre-construction assessment will be completed by qualified engineer and reviewed and approved by USAID			
	Local hydrology hole provide sufficient water to mee anticipated	Hydrological data will be compiled prior to			
Water tower rehabilitation	Just three of the sub- activities or components this project would entail				
	qualified/trained and provided with new PPE?	workers provided to			
	Site security tured against no value of the security tured against unauthorized	Construction site will be secured by fencing or other means of controlling access to authorized personnel			
Water point maintenance	Drage—will water collection points contribute to unsanitary conditions or vector breeding?	Water points will be sited consistent with best practices for community water provision			
	Sanitation—will water points be kept clean and operation to ensure access to safe water?	Local water committees will be formed and/or engaged to maintain water collection points			
	Access—will water points remain available to participating residents or beneficiaries?	Local water committees will be formed and/or engaged to administer water collection points			



And finally. . .the EMMP itself

## **WASH Rehabilitation**

IEE/EA Condition	Mitigation Measures	Monitoring Indicators	Monitoring & Reporting Schedule	Responsible Party(ies)
Water quality testing will be completed prior to construction and at regular intervals thereafter and will conform to USAID and host-country standards	made availably	Conformance with USAID and host-country drinking water quality standards  wo of the IEE ditions from the left water the left was a second control of the left water	ar quarterly	<ul> <li>IP's engineer, construction manager</li> <li>USAID COR</li> </ul>
Local water committees will be formed and/or engaged to maintain water collection points	respect to gender, age, social status, etc. with defined mandates for water point maintenance Training in basic maintenance skills and organizational management will be provided to committees  Sustainable funding schemes will be developed in consultation with and covenanted by water committees in order to sustain operations and effectively maintain water points	participating village/community, including gender, age and family affiliation of each member • Maintenance of water point that is sanitary, unobstructed, and well drained	rosters will be ompiled not less than one month prior to water point installation  Rosters of water committee members will be attached as an annex to the IPs annual project report  Training and capacity building activities for water point committees will be reflected in regular project quarterly reporting	IP's communications/out manager  23