USAID
FROM THE AMERICAN PEOPLE

Introduction to Environmental Mitigation & Monitoring Plans (EMMPs)

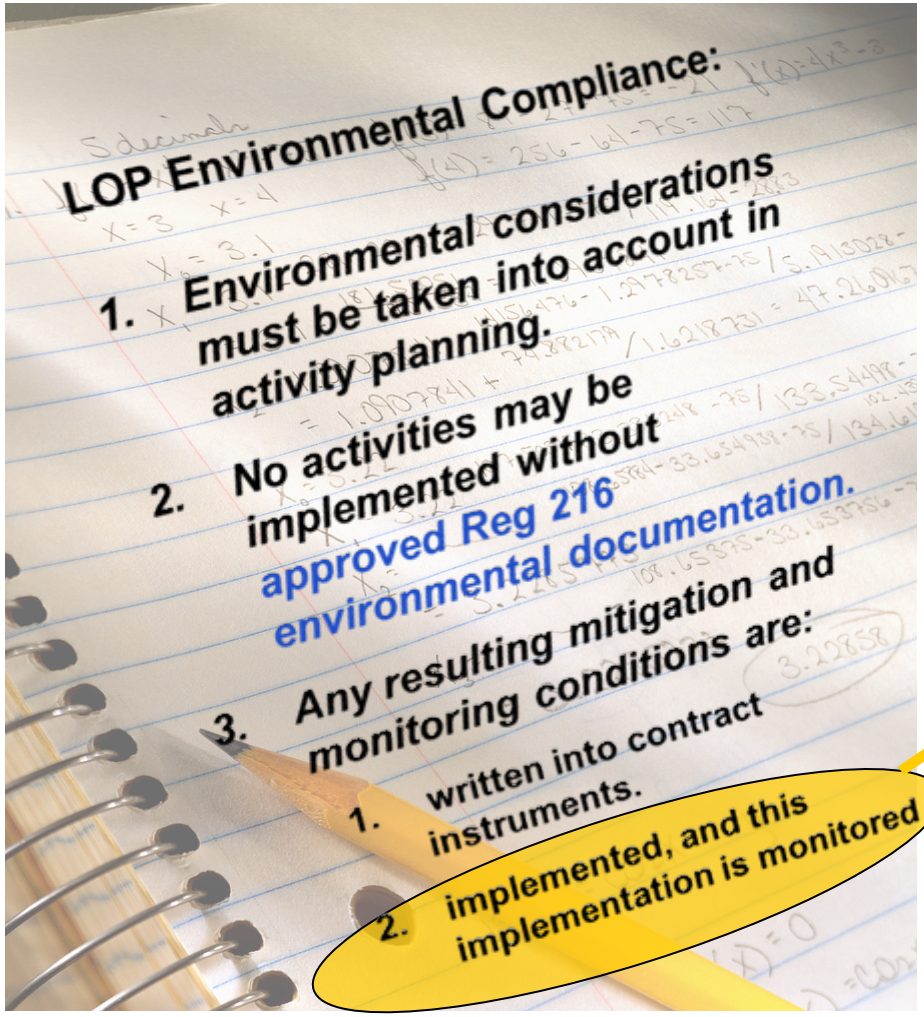
Environmental Compliance/ESDM Training Workshops
Lake Naivasha, Kenya ▪ January & February 2010

Congratulations…

We are all Mitigation and Monitoring Experts!

- **Now, we must apply our knowledge**
  - *IEEs (and EAs) are useless unless the conditions they establish are implemented!*
  - ***USAID's environmental procedures therefore require implementation***

Review: Key LOP Env. Compliance Requirements



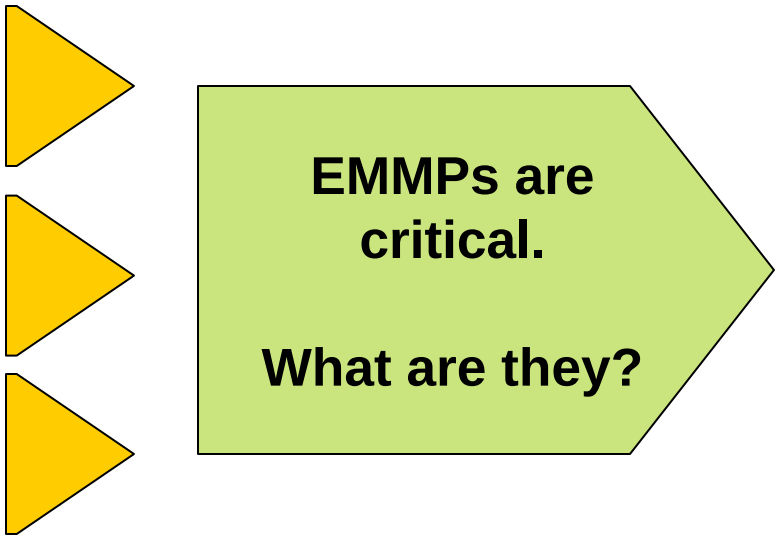
What does the ADS say?

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

Implementation of IEE/EA conditions

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

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



Except Title II partners, who write their own IEEs.

EMMPs: Simple in concept

Basic EMMP template

An EMMP sets out:

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

From IEE, include only activities with conditions

To determine if mitigation is in place and successful

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

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

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

See EMMP template in sourcebook

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

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

Implementation of IEE/EA conditions

More sophisticated EMMP formats can include:

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

How are EMMPs being required?

Three mechanisms:

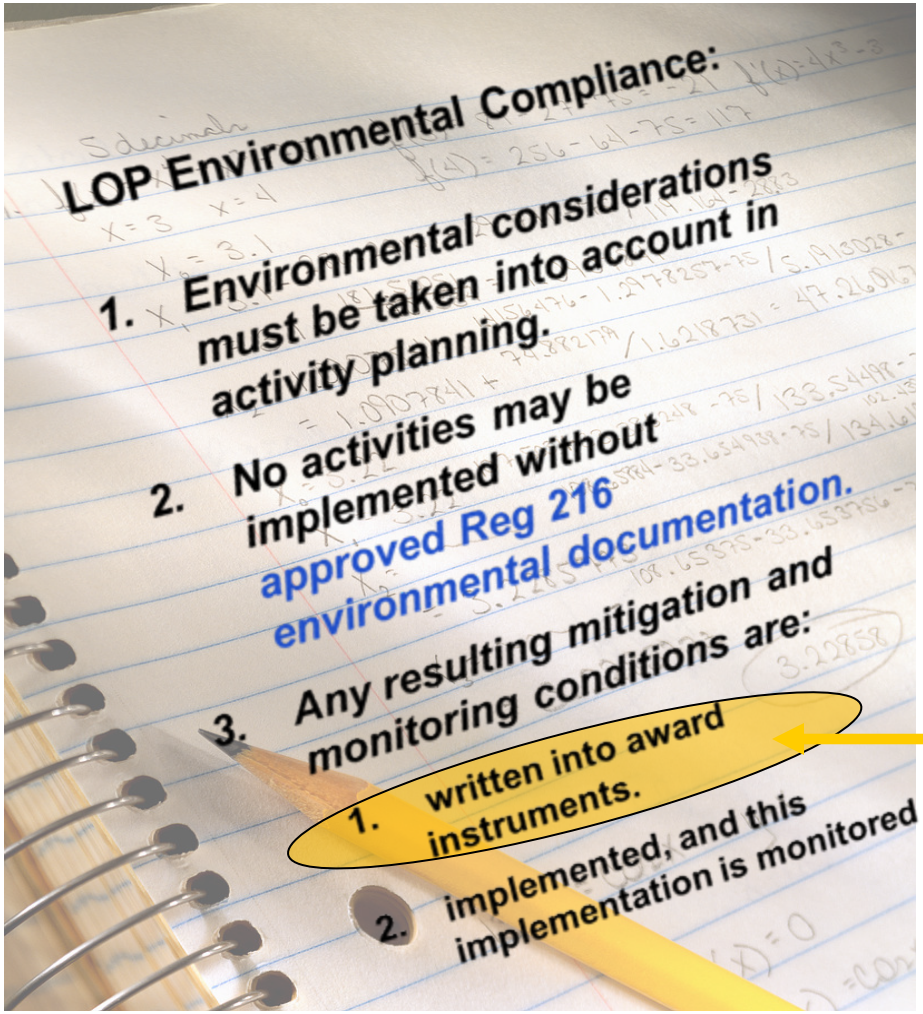
1. Technical direction from C/AOTR
2. Required by contract/agreement
3. Required by MYAP guidance (Title II only)

More about this…

!

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

USAID is Required to Write IEE/EA Conditions into Awards



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

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

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

New awards and significant modifications are requiring that:

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

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

Specifically:

1. Complete EMMP exists/is developed.

2. Workplans and budgets integrate the EMMP

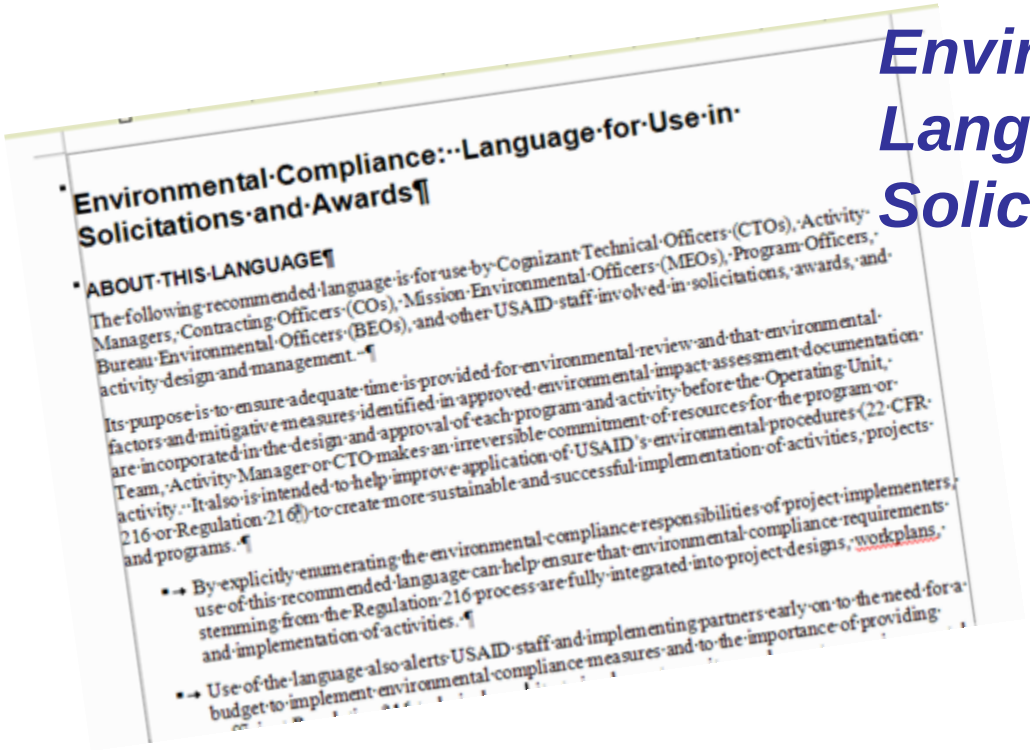
3. Project reporting tracks EMMP implementation

And new solicitations require that

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

Source of best-practice language

(almost) new



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

ABOUT·THIS·LANGUAGE¶

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·activity·design·and·management.·¶

Its·purpose·is·to·ensure·adequate·time·is·provided·for·environmental·review·and·that·environmental·factors·and·mitigative·measures·identified·in·approved·environmental·impact·assessment·documentation·are·incorporated·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·CFR·216·or·Regulation·216)·to·create·more·sustainable·and·successful·implementation·of·activities,·projects·and·programs.·¶

- 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·implementation·of·activities.·¶
- 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·

Hardcopy in your sourcebook.

Also 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 use being strongly encouraged**

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

The ECL 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 verification/oversight.

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

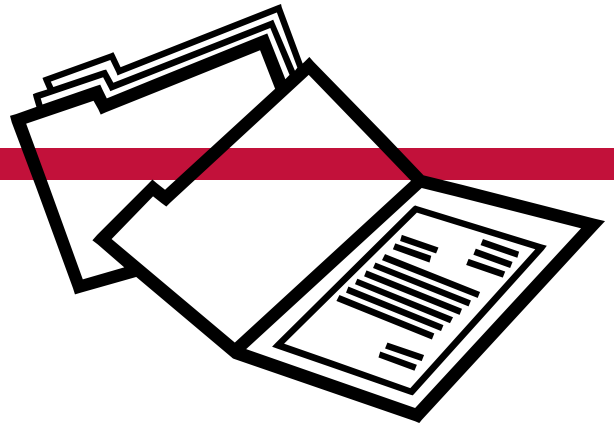
Implementing Partners

Provides clarity regarding environmental compliance responsibilities

Prevents "unfunded mandates"-– requirements to implement M&M after implementation has started & without additional budget.

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

How are EMMPs approved?



EMMPs must be approved by the C/AOTR

Usually submitted & approved with the workplan or PMP

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

Sometimes additional review by the MEO or REA.

EMMP example:

Irrigation Rehabilitation

PROJECT BRIEFING:

System reconstructed early 1980s

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

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

The other is made of stone and soil

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

EMMP example:

Irrigation Rehabilitation

PROJECT BRIEFING:

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

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

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

No adjacent wetland nor critical wild life habitat.

Doing laundry in the canal

EMMP example:

Irrigation Rehabilitation

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

PROJECT BRIEFING:

The canals are hand made and carry open water from upstream

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

System maintenance committee not functional

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

EMMP example:

Irrigation Rehabilitation

Impacts/Baseline Issues & Mitigations

(Excerpt—summary language)

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

And finally. . .the EMMP itself

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

EMMP example:
Irrigation Rehabilitation

EMMP & Monitoring Log
(Excerpt)

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