Special Topic:
Environmental Compliance for Higher-Risk Interventions

GEMS Environmental Compliance-ESDM Training Series
Rwanda ▪ April, 2015

Session Objectives:

- Identify common types of activities that present unique environmental risks:
  - *Water provision: WASH, irrigation, small-scale construction*
  - *Pesticides: food security, economic growth*
- Discuss USAID approach to assessing and mitigating potential adverse impacts
- Review preparation of specialized environmental compliance documents
- Understand evolving “best practices”

Activity #1: Water Provision

- Underpins public health + sustained economic growth
- Central to many development objectives
- Can adversely impact human, environmental health
- USAID objective = “Safe Water”
- Local environmental conditions, capacity, and host-country requirements can vary widely
- Water Quality Assurance Plan (WQAP) accounts for variations and provides flexibility

Recent WQAP Assessment

- Three-phase AFR/SD-commissioned study to assess extent and efficacy of AFR WQAP requirement
- Phase I: Desk review using IEE database
- Phase II: Verify WQAP preparation (and extent of implementation) for projects for which it is required
- Phase III: Field work to assess WQAP efficacy and attributes (Ghana, Zimbabwe, Kenya + Tanzania)
- Multiple report-outs to AFR and across Agency and USG partners

Challenges to Implementation

- WQAP not evenly addressed or required in IEEs for applicable projects:
  - *WASH*
  - *Agriculture (irrigation)*
  - *Construction/rehabilitation of schools, clinics, etc.*
- Where required by IEE, sometimes no record of WQAP being developed or implemented
- Some WQAPs not responsive to full range of challenges

Factors for Successful WQAPs

Verified through field work (Phase III):

- *Clear and consistent host country regulations*
- *Coordination with host country institutions*
- *Structured community operation and maintenance of water points*
- *Quality and experience of IP*
- *Access to well-equipped and well-staffed laboratories*
- *Adequate host-country personnel and expertise*
- *Effective resource management*
- *Inclusion of water quality standards in contracts and awards*

Recommendations

Recommendations	Key Actors
Reconsider the importance of underlying IEE conditions, which devolve too much to a WQAP mechanism versus a traditional EMMP	Agency Environmental Council; Africa Bureau Environmental Officer; Africa Bureau Water Advisor; Regional Environmental Advisors; Office of Water Staff
Develop a template and/or example of a high-quality WQAP or EMMP addressing water monitoring requirements for use by Mission Environmental Officers, Agreement Officer's Representative/Contracting Officer's Representative, and IPs	Africa Bureau Environmental Officer; Africa Bureau Water Advisor; Office of Water Staff
Select IPs with water quality monitoring experience and a good track record of achieving safe water in the host country by strengthening selection criteria	Policy, Planning, and Learning; Office of Acquisitions and Assistance
Provide technical training to all Regional Environmental Advisors and Mission Environmental Officers on water quality monitoring	Africa Bureau Environmental Officer; Africa Bureau Water Advisor; Office of Water Staff
Improve community-based monitoring and engagement in the water quality process to foster community ownership of water points and improve the likelihood of long-term monitoring	Office of Water Staff, Mission Environmental Officers, Representatives/Contracting Officer Representatives
Seek opportunities to provide low-cost technical support to facilitate community-level water quality analysis	Office of Water Staff, Mission Environmental Officers, Agreement Officer Representatives/Contracting Officer Representatives

Recommendation #1: Revisit IEE Language

- IEEs include clearer, more prescriptive WQAP requirement

- Prior to drinking water provision, the project will prepare and receive approval for a Water Quality Assurance Plan (WQAP). The WQAP will be prepared in consultation with the cognizant AOR/COR and/or Activity Manager. Its purpose is to ensure that all new and rehabilitated USAID-funded sources of drinking water provide water that is safe for human consumption. The completed WQAP must be approved by: the AOR/COR and/or Activity Manager; the MEO; and the REA.
- Once approved, the WQAP must be implemented in full, and for the duration of drinking water activities. Implementation must include testing of water prior to making the supply point available to beneficiaries.
- The WQAP constitutes a key element of the project's EMMP. As with all other elements of the EMMP, project budgets, workplans, and staffing plans must provide for its full implementation. The approved WQAP must include at minimum the following sections:
    - Project information (name of project, name of IP, period of performance, contact information, name of COR/AOR)

Recommendation #2: WQAP Template

- Make available a high-quality WQAP template for use by MEOs, A/CORs, and IPs

Table 1. Example Summary EMMP Matrix

XXX WASH PROJECT
SITE: XXX
Environmental Mitigation/ Enhancement Plans for Established WASH Projects

WATER QUALITY ASSURANCE PLAN

Activity: Water Supply
Adverse Impact: Inadequate Water Quality

Sites: Water Pans: *Location XXXX.* **Boreholes:** *Location XXXX.* **Pipeline Extension:** *Location XXXX.*
Rock Catchments: *Location XXXX.* **RWH Tanks:** *Location XXX.*

Source Type	Mitigation Plan	Evidence of mitigation measure	Follow up/ frequency	Responsible persons/ organizations
	Design Stage			
	Construction Stage			
Water Pans	a) Construct cattle troughs away from the water pan site b) Provide a cutoff trench for any storm water flowing in from any nearby farms, markets, trading centers etc c) Construct a suitable silt trap to control siltation of the reservoir d) Construct the embankment with gentle and well compacted slopes to prevent any soil erosion of the walls during rainy seasons e) Provide adequate dead storage below the intake chamber to minimize siltation of the draw pipe f) Fence round the water pan site g) Ensure all spilled oils and fuels are properly disposed h) Properly dispose off all waste/ unwanted matter from the reservoir i) Install an appropriate water treatment unit	Installation, completion reports, photos	After construction and every three months	Contractors, community and IP
Boreholes	a) Install pipe casings in case the walls are prone to collapse b) Proper drainage of waste materials from the drilled pit to prevent any seepage to the ground water c) Proper development of the pit to remove any unwanted material occurring during drilling process	Installation, completion reports, photos water quality reports, photos, design drawings for treatment units	During construction, after construction and after every three	Contractors, IP, commu

Activity #2: Pesticide Use

- Key input for increased agricultural production
- Can enhance food security and promote economic growth
- Especially harmful to human and environmental health
  - *Pesticides are produced and formulated to kill*
  - *USAID approaches pesticide use with extreme caution*
- Dedicated portion of Reg. 216
  - *22 CFR216.3(b)—USAID Pesticide Procedures*
- **P**esticide **E**valuation **R**eport and **S**afer **U**se **A**ction **P**lan: PERSUAP

USAID Pesticide Procedures

When a project includes assistance for procurement or use, or both, of pesticides registered for the same or similar uses by USEPA without restriction, the Initial Environmental Examination for the project shall include a separate section evaluating the economic, social and environmental risks and benefits of the planned pesticide use to determine whether the use may result in significant environmental impact. Factors to be considered in such an evaluation shall include, but not be limited to the following:

(a) The USEPA registration status of the requested pesticide;

(b) The basis for selection of the requested pesticide;

(c) The extent to which the proposed pesticide use is part of an integrated pest management program;

(d) The proposed method or methods of application, including availability of appropriate application and safety equipment;

(e) Any acute and longterm toxicological hazards, either human or environmental, associated with the proposed use and measures available to minimize such hazards;

(f) The effectiveness of the requested pesticide for the proposed use;

(g) Compatibility of the proposed pesticide with target and nontarget ecosystems;

(h) The conditions under which the pesticide is to be used, including climate, flora, fauna, geography, hydrology, and soils;

(i) The availability and effectiveness of other pesticides or nonchemical control methods;

(j) The requesting country's ability to regulate or control the distribution, storage, use and disposal of the requested pesticide;

(k) The provisions made for training of users and applicators; and

(l) The provisions made for monitoring the use and effectiveness of the pesticide.

PERSUAP Stocktaking – Overview

- **A consultative stocktaking to inform the best approach for AFR to take in implementing USAID's "Pesticide Procedures" (22 CFR 216.3(b)**
  - *24 total interviews undertaken (mostly by phone):*
    - PERSUAP preparers; PERSUAP reviewers; USAID environmental officers; and Implementing Partners

- **Primary Interviewee Concerns**
  - *A. PERSUAP length and complexity*
  - *B. IP Funding and capacity for implementation*
  - *C. Limited relevance to project context – too US-centric*
  - *D. Redundant preparation and review effort*
  - *E. PERSUAP review bottlenecks*
  - *F. Lack of complete, current PERSUAP preparation guidance*
  - *G. Lack of integration and mainstreaming*
  - *H. Lack of mission capacity to support/oversee pesticide compliance/safer use*

PERSUAP Stocktaking – Findings

- **Consultant's Evaluation**
  - *After review & approval, PERSUAPS are typically technically sound documents*
  - *High, duplicative transaction costs of PERSUAP development*
  - *Pesticide/Pest management resources are improperly weighted toward PERSUAP preparation rather than IPM and safer use in project implementation*
  - ***Most serious problem: actual implementation/compliance with safer use conditions is limited, and largely unmonitored.***

- **Root Causes**
  - *PERSUAPs "wear too many hats"*
  - *Requirements PERSUAPs place on IPs are not always clear or manageable*
  - *PERSUAPs repeat much of the same technical analysis*
  - *Lack of preparation guidance creates additional burden during both preparation and review*
  - *RFP/As & program designs place insufficient emphasis on IPM and pesticide safer use*

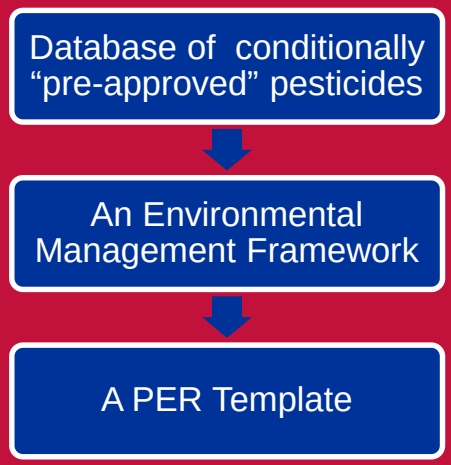
Potential New Approach

STOCKTAKING RECOMMENDATIONS

1. Separate the PER from the SUAP with mandatory BEO clearance only for the PER
2. Via a PEA, develop a set of pesticides preapproved for specific uses and with specific use conditions in AFR programs.
3. Put the output of the PEA into an IP-accessible database, updated annually.
4. Develop a streamlined structure/template for the PER

PROPOSED WAY FORWARD

1. Conduct Programmatic Environmental Assessment (PEA) for pesticide promotion/use in AFR.
2. PEA output will include:



PEA for Pesticide Use in AFR?

Database of conditionally "pre-approved" pesticides

- *Publically available*
- *Approved Active Ingredients (AIs) and Concentrations*
- *Will establish use conditions for approved AIs*
- *Will provide resolution on approved RUP products*
- *Will utilize various resources, but fundamentally rely on USEPA registration status for all governing decisions*
- *The specific parameters (e.g. AIs selected, formulations considered, uses/crops covered) will be vetted via the PEA process*

PEA for Pesticide Use in AFR?

An Environmental Management Framework

- *Establishes process for preparation, review, and approval of PERs developed through use of the database.*
- *2 Preparation Approaches to Consider:*
  - Scenario 1: PER Preparer Queries Database based upon Intended Pesticide Use(s).
  - Scenario 2: PER Preparer Queries Database based upon Active Ingredient(s) and Formulation(s).

Scenario 1 - PER Preparer Queries Database based upon Intended Pesticide Use(s).

Step 1

The database:

1. Generates list of approved pesticides and/or pesticide products for those uses
2. Allows user to select from the list provided
3. Delivers “Pesticide Profile Sheets” for each pesticide (MSDS, or MSDS-lite)

Step 2

PER Preparer must:

1. Cross-reference “approved” list against host-country pesticides registrar.
2. Select from host-country approved pesticides that are on “approved” list or qualify for use as “Same or similar products for same or similar use”.
3. Begin PER preparation

Step 3

PER preparation requires (for each proposed pesticide):

1. Indicating host-country registration status
2. Collecting pesticide product labels
3. Developing context-specific evaluation of 12 Factors listed in Reg. 216.3 Pesticide Procedures (where applicable, see template below)

Scenario 2 - PER Preparer Queries Database based upon Active Ingredient(s) and Formulation(s).

Step 1

The database:

1. Generates lists of matching registered products and/or confirms eligibility of AI + formulation
2. Allows user to select from approved products listed
3. Delivers “Pesticide Profile Sheets”

Step 2

PER Preparer must:

1. Confirm host-country registration status of proposed products; or
2. Screen host-country registration for “same or similar products for same or similar use” based on AI + formulation + composition.
3. Begin PER preparation

Step 3

PER preparation requires (for each proposed pesticide):

1. Indicating host-country registration status
2. Collecting pesticide product labels
3. Developing context-specific evaluation of 12 Factors listed in Reg. 216.3 Pesticide Procedures (where applicable, see template below)