

# **GUIDELINES FOR IMPLEMENTING PARTNERS ON THE USAID LAC ENVIRONMENTAL MITIGATION PLAN & REPORT (EMPR)**

August 18th, 2009

## **A. Background**

All projects funded by USAID must conform to US environmental regulations (22 CFR 216) requiring evaluation to ensure that no adverse environmental impacts result from the projects, that cannot be mitigated. All USAID programs funded through USAID LAC Missions fall under an Environmental Threshold Decision (ETD) designated at the Strategic Objective level. The Environmental Mitigation Plan & Report (EMPR), so described by these guidelines, ensures programmatic compliance with 22 CFR 216 by meeting the conditions specified in the applicable ETDs authorized by the USAID Latin America and the Caribbean (LAC) Bureau Environmental Officer (BEO).

Programs implemented by USAID LAC Mission implementing partners (IPs) include a range of discrete-activities under various awards that will likely have a risk for adverse environmental impact. Illustrative discrete activities include building refurbishment and medical waste management. This EMPR procedure will provide for both the screening for environmental risk, preparation of a mitigation plan and reporting on monitoring of these mitigation measures, which require that appropriate consideration is given to gender as a social impact factor in the development of a mitigation plan and subsequent measures.

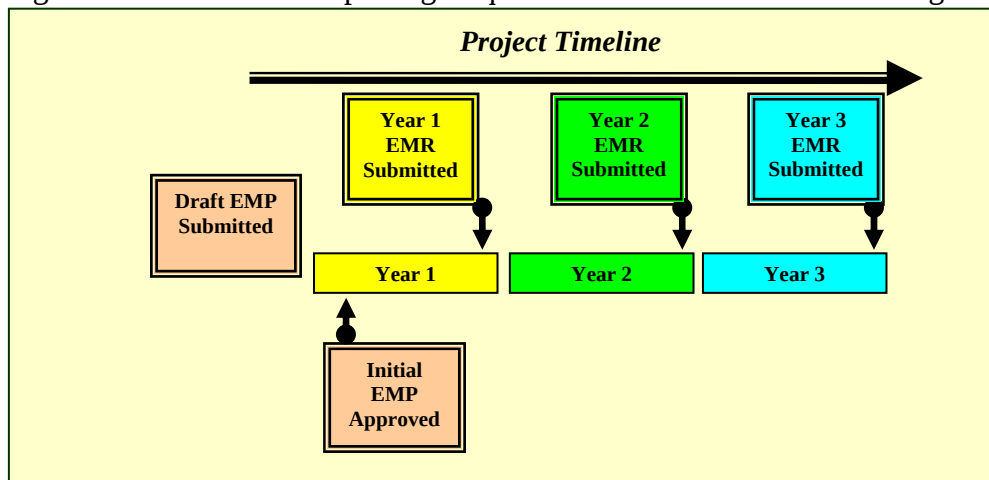
The EMPR initially categorizes projects into three types: No Risk, Medium Risk and High Risk. Those with No Risk can continue without further review. Those with High Risk must be reconsidered for the need of an Environmental Assessment. The EMPR deals with those projects at Medium Risk (*see Figure 2*).

All grantees/contractors will be required to fill out an Environmental Mitigation Plan & Report (as attached) per project type that includes:

1. The Environmental Screening Form,
2. The Identification of Mitigation Plan, and
3. The Environmental Monitoring and Tracking Table.

Program managers/COTRs and Chiefs of Parties can work with the USAID Mission Environment Officer (MEO) to ensure impacts are sufficiently identified and mitigation actions are agreed upon, including clear guidance on the procedures for gender integration where fitting.

Figure 1: Timeline of Reporting Requirements for Environmental Mitigation



## B. Timing of Reporting Requirements

During the acquisition process, the applicant or contractor submits a suggested/draft EMPR. Gender issues must be addressed in the Environmental Mitigation Plan in keeping with the Agency’s executive message on gender integration dated May 4, 2009. Once the Implementing Partner is chosen, a revised initial EMPR is submitted by the applicant or contractor to the COTR, Mission Environmental Officer, and Regional Environmental Officer for approval before commencing activities. For sub grants, the grantee is required to fill out the EMPR and submit it for approval to the Chief of Party (COP). The COP then submits the EMPR for review and final approval to the COTR and MEO.

A format for this initial EMPR can be seen in attachment 1; it includes:

1. An initial screening process using the “Environmental Screening Form” (Appendix 1, Table 1) to assure the project is at the Medium Risk Level followed by,
2. The identification of potential impacts and related mitigation measures using the “Identification of Mitigation Plan” (Appendix 1, Table 2) for each sub-activity.
3. The Environmental Monitoring and Tracking Table (Appendix 1 Table 3) that documents the necessary mitigation measures to be monitored, lists monitoring indicators, and includes who will conduct the monitoring when. Table 3 also includes a monitoring chart that documents who conducted the monitoring and the effectiveness of the mitigation measures.

At the end of each year of implementation, the EMPR is resubmitted with the same information as provided initially, plus a component reflecting the status of implementation and effectiveness monitoring, of the identified mitigation measures using the “Environmental Monitoring and Tracking Table” (Appendix 1, Table 3). This table will be used for project environmental monitoring and will be submitted to the USAID Contracting Officer’s Technical Representative (COTR), formerly known

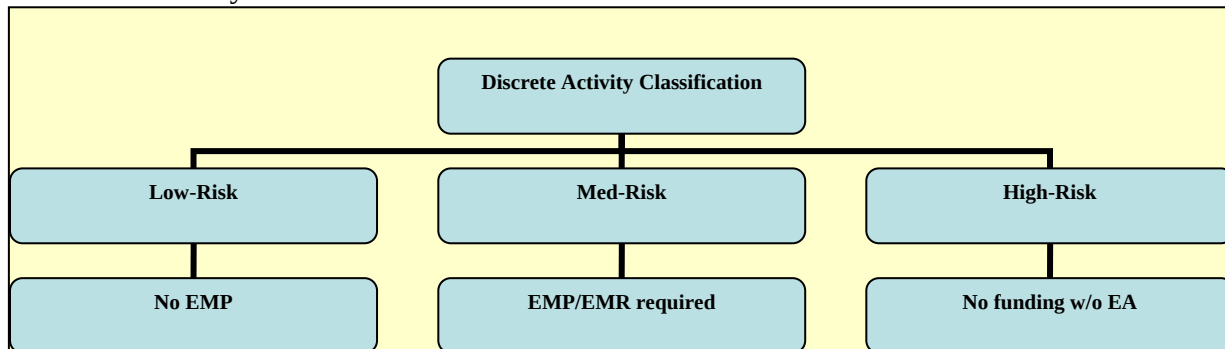
as CTO, on an annual basis along with the initial EMPR as well as a narrative providing details on the mitigation process. The report should not exceed ten pages (excluding annexes).

## C. Initial Environmental Mitigation Report

### 1. Classification of Level of Risk

Components of a program or discrete activities under an award can have varying levels of risk for environmental damage and therefore require different courses of action (Figure 2). No-risk activities, classified under “i” below, do not require the EMPR as they are already addressed under a “categorical exclusion” determination in the original SO-level IEE and Environmental Threshold Decision at the Mission. High-risk activities (“ii”) will have significant environmental impacts that will require an Environmental Assessment (EA) contracted through the IP with MEO consultation to a professional Environmental Impact organization with final approval by the LAC Bureau Environmental Officer. Such activities are not to be avoided if they meet a crucial need of the community (e.g., solid waste disposal facility, municipal-scale waste water treatment plant). Medium-risk activities (“iii”) will require the IP to screen environmental impacts and plan for mitigation of adverse environmental impacts. It is to these medium-risk activities that this EMPR guidance primarily applies.

Figure 2: Schematic of required action based on the level of risk of a component or discrete activity under an award.



#### i. Discrete Activities that Do Not Require Mitigation Plans (No-Risk):

An illustrative list of no-risk discrete activities where no mitigation reporting is required includes:

- o Education or training\*, unless it implements or leads to implementation of actions that impacts the environment (such as construction of schools or use of pesticides),
- o Community awareness initiatives,
- o Controlled research/demonstration projects in a small area,
- o Technical studies or assistance,
- o Information transfers.

If there is a risk that the actual implementation of materials learned during training could adversely impact the environment (e.g., training on agricultural techniques), the training is expected to include as part of its curriculum, an analysis of environmental impacts and planning for mitigation.

ii. Discrete Activities that Cannot be Supported (High-Risk):

Under the environmental regulations of USAID, if there is a discrete activity which is considered critical to the needs of the community that may have a significant environmental impact, such activities will require an Environmental Assessment. In the case of pesticide use a Pesticide Evaluation Report and Safer Use Action Plan (PERSUAP) will need to be prepared by the partner and approved by the USAID Latin America and the Caribbean (LAC) Bureau Environmental Officer (BEO). Such activities include but are not limited to:

- o Agricultural, livestock introduction or other activities that involve forest conversion,
- o Resettlement of human populations,
- o Large water management systems such as dams or impoundments,
- o Drainage of wetlands,
- o Introduction of exotic plants or animals,
- o Permanent modification of the habitat supporting an endangered species,
- o Industrial level plant production or processing (this does not include community or regional plant nurseries aimed at restoring areas after fires),
- o Installation of aquaculture systems in sensitive lakes, marine waters (not land-based fish ponds),
- o Procurement of timber harvesting equipment, including chainsaws,
- o Use of pesticides (insecticides, herbicides, acaricides, fungicides),
- o Large scale construction in un-degraded land,
- o Large scale new construction involving permanent living quarters and/or sanitation facilities,
- o Cutting of trees over 20 cm diameter breast height, especially tropical trees, except as needed to control disease or maintain forest health.
- o Construction of new roads or upgrading/maintenance of extensive road, fire break or trail systems through un-degraded forest land or natural habitats.

iii. Discrete Activities that can be Supported if Mitigation Measures are Planned and Implemented (Medium-Risk):

Many discrete activities under an agreement will fall between the two extremes mentioned above and offer some adverse environmental impact that can be mitigated with proper planning. For these activities the Implementing Partner (IP) will be responsible for completing the EMPR on an annual basis.

## 2. Sector-Specific Environmental Screening Form

The Environmental Screening Form contains information relevant to the potential environmental impact over the life of activity to natural resource and communities, local planning permits, and

environment and health. If items in the Environmental Screening Form (Appendix 1, Table 1) from Column “A” are checked then items for monitoring and mitigation are to be specified in the “Identification of Mitigation Plan” (Appendix 1, Table 2). The Mitigation Plan simply outlines the plan of action for mitigation of planned activities. The Mission Environmental Officer is to approve these forms, with special attention to those projects with identified impacts (i.e., projects with any check marks in Column A).

For reference on mitigation information on a wide variety of discrete activities, refer to the “[USAID LAC Environmental Guidelines](#)”. Illustrative sector-specific guidelines include: WHO guidelines for handling and disposal of medical waste, “[Low-Volume Roads Engineering: Best Management Practices Field Guide \(Keller and Sherar, 2003\)](#)” and the World Wildlife Fund Agriculture and the Environment handbook.

#### **D. Annual Environmental Mitigation Report**

On an annual basis each implementing partner will submit an “Environmental Mitigation Report” using the attached EMPR Table 3 (Appendix1). The EMPR contains information relevant to the potential environmental impact over the life of a discrete activity under an award and includes: A) a copy of the initial EMPR completed during the initial project planning (reference section B above); B) the prescribed mitigation measures using the “ Identification of Mitigation Plan (Appendix 1, Table 2)””; and C) synthesized data on these mitigation measures collected throughout the year and tracked in the Environmental Monitoring and Evaluation Tracking Table (Appendix 1, Table 3). As it is often difficult to quantitatively measure progress of complex mitigation measures, it is necessary to include inserted digital photos (with relevant maps) to describe progress of mitigation activities.

USAID Mission requires that Implementing Partners clearly demonstrate competence in implementing discrete activities using best management practices which most often will provide the additional benefit of environmental protection. In addition, the mitigation activities should consider the critical importance of integrating gender considerations in all stages of planning, programming, implementation, and monitoring of USAID activities.

#### **Sections of the EMPR include:**

1. EMPR Coversheet
2. EMPR Narrative (to be filled out with project specific information)
3. Annexes:
  - a. Environmental Screening Form (Table 1),
  - b. Identification of Mitigation Plan (Table 2)
  - c. Environmental Monitoring and Evaluation Tracking Table (Table 3).
4. Photos, Maps, Level of Effort

Reference: February 8, 2007; L. Poitevien (USAID/Haiti), M. Donald (USAID/Dominican Republic), E. Clesceri (USAID/Washington). Guidelines for Implementing Partners on the USAID Haiti Environmental Mitigation Report.

**GUIDELINES FOR IMPLEMENTING PARTNERS ON THE USAID/BRAZIL  
ENVIRONMENTAL MITIGATION PLAN & REPORT (EMPR)**

Appendix 1:

I. Coversheet for ENVIRONMENTAL MITIGATION PLAN & REPORT  
(EMPR)

USAID MISSION SO # and Title: \_\_\_\_\_

Title of IP Activity: \_\_\_\_\_

IP Name: \_\_\_\_\_

Funding Period: FY\_\_\_\_\_ - FY\_\_\_\_\_

Resource Levels (US\$): \_\_\_\_\_

Report Prepared by: Name: \_\_\_\_\_ Date: \_\_\_\_\_

Date of Previous EMPR: \_\_\_\_\_ (if any)

Status of Fulfilling Mitigation Measures and Monitoring:

\_\_\_\_\_ Initial EMPR describing mitigation plan is attached (Yes or No).

\_\_\_\_\_ Annual EMPR describing status of mitigation measures is established and attached (Yes or No).

\_\_\_\_\_ Certain mitigation conditions could not be satisfied and remedial action has been provided within the EMPR (Yes or No).

USAID Mission Clearance of EMPR:

Contracting Officer's Technical Representative: \_\_\_\_\_ Date: \_\_\_\_\_

Mission Environmental Officer: \_\_\_\_\_ Date: \_\_\_\_\_  
( )

Regional Environmental Advisor: \_\_\_\_\_ Date: \_\_\_\_\_  
( )

## II. Environmental Mitigation Plan & Report Narrative

*Note: summary instructions are in italics and not to be included in the report, but rather should be filled out with project specific information)*

**Note: Outline to be included in the report is in bold.**

### 1. Background, Rationale and Outputs/Results Expected:

*Summarize and cross-reference proposal if this review is contained therein.*

### 2. Activity Description:

*Succinctly describe location, site details, surroundings (include a map, even a sketch map). Provide both quantitative and qualitative information about actions needed during construction, how intervention will operate and any ancillary development activities that are required to build or operate the primary activity (e.g., road to a facility, need to quarry or excavate borrow material, need to lay utility pipes to connect with energy, water source or disposal point or any other activity needed to accomplish the primary one but in a different location). If various alternatives have been considered and rejected because the proposed activity is considered more environmentally sound, explain these. Describe how gender considerations have been incorporated into the activity. How will gender relations affect the achievements of activity results? How will the activity results affect the relative status of men and women?*

### 3. Environmental Baseline:

*Describe affected environment, including essential baseline information available for all affected locations and sites, both primary and ancillary activities. Describe how the activity will involve men and women who directly affect the environment. Methodologies for data collection and analysis for gender-sensitive implementation and monitoring of activities are encouraged.*

### 4. Evaluation of Environmental Impact Potential of Activities (Table 2):

*As a component of the Identification of Mitigation Plan (Appendix 1, Table 2), describe impacts that could occur before implementation starts, during implementation, as well as any problems that might arise with restoring or reusing the site, if the facility or activity were completed or ceased to exist. Explain direct, indirect, induced and cumulative effects on various components of the environment (e.g., air, water, geology, soils, vegetation, wildlife, aquatic resources, historic, archaeological or other cultural resources, people and their*

*communities, land use, traffic, waste disposal, water supply, energy, etc.). Indicate positive impacts and how the natural resources base will be sustainably improved.*

*For example, any activity that increases human presence in an area, even temporarily, will increase noise, waste, and the potential for hunting, timbering, etc.*

*Evaluating the environmental impact potential of activities must include gender-sensitive indicators and sex-disaggregated data when the activities or their anticipated results involve or affect women and men differently; and if so, this difference should be an important factor in managing for sustainable activity impact.*

5. Environmental Mitigation Actions (Tables 2 & 3):

*For the Initial EMPR: List the mitigation measures in the “Identification of Mitigation Plan” (Table 2) and describe monitoring of these mitigation measures in the “Environmental Monitoring and Evaluation Tracking Table” (Table 3).*

*For the EMPR: Describe status of complying with the conditions. Examples of the types of questions an IP should answer to describe “status” follow.*

- 1) What mitigation measures have been put in place? How is the success of mitigation measures being determined? If they are not working, why not? What adjustments need to be made?
- 2) What is being monitored, how frequently and where, and what action is being taken (as needed) based on the results of the monitoring? In some situations, an IP will need to note that the monitoring program is still being developed with intent to satisfy the conditions. Alternatively, it could happen that the conditions cannot be achieved because of various impediments.

6. GENDER

Integrating gender considerations into all stages of planning, programming, and implementation of development assistance is not only a priority for USAID, but also an essential part of effective and sustainable development. The Automated Directive System (ADS) 201 sets out specific requirements to help ensure that appropriate consideration is given to gender as a factor in development planning at the Assistance Objective and the Intermediate Results level of Assistance Objectives all the way down to the activity level. This programming policy includes clear guidance on the procedures for gender integration where determined to be appropriate. In this regard, gender issues must be addressed in procurement documents and evaluation criteria. Gender equality is a USG-wide priority, and USAID has and will continue to take a

lead role in that effort. For example, USAID/Environmental Protection Program monitors how men and women will be involved in the process of improving the Dominican Republic's Environmental impact assessment procedures. The Program is documenting gender participation in all of its activities. Whenever possible, gender based differences in roles, attitudes and concerns should also be documented.

### III-A. Environmental Screening Form (Table 1)

|                                                      |                                                                                                                                                                                                                 |          |          |                                       |             |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|---------------------------------------|-------------|
| Name of Activity: _____                              |                                                                                                                                                                                                                 | Column A | Column B | Col C                                 |             |
| Type of Activity: _____                              |                                                                                                                                                                                                                 | Yes      | No       | If answered yes to Col. A. is it a--? |             |
| Grantee: _____                                       |                                                                                                                                                                                                                 |          |          | High Risk                             | Medium-Risk |
| Date: _____                                          |                                                                                                                                                                                                                 |          |          |                                       |             |
| <b>IMPACT ON NATURAL RESOURCES &amp; COMMUNITIES</b> |                                                                                                                                                                                                                 |          |          |                                       |             |
| 1                                                    | Will the project involve construction <sup>1</sup> of any type of structure (building, check dam, walls, etc)?                                                                                                  |          |          |                                       |             |
| 2                                                    | Will the project involve the construction <sup>2</sup> or repair of roads or trails?                                                                                                                            |          |          |                                       |             |
| 3                                                    | Will the project involve the use, involve plans to use or training in the use of any chemical compounds such as pesticides <sup>3</sup> (including neem), herbicides, paint, varnish, lead-based products, etc? |          |          |                                       |             |
| 4                                                    | Involve the construction or repair of irrigation systems?                                                                                                                                                       |          |          |                                       |             |
| 5                                                    | Involve the construction or repair of fish ponds?                                                                                                                                                               |          |          |                                       |             |
| 6                                                    | Involve the disposal of used engine oil?                                                                                                                                                                        |          |          |                                       |             |
| 7                                                    | Will the project involve implementation of timber management <sup>4</sup> or extraction of forest products?                                                                                                     |          |          |                                       |             |
| 8                                                    | Are there any potentially sensitive terrestrial or aquatic areas near the project site, including protected areas?                                                                                              |          |          |                                       |             |
| 9                                                    | Does the activity impact upon wildlife, forest resources, or wetlands?                                                                                                                                          |          |          |                                       |             |
| 10                                                   | Will the activities proposed generate airborne gases, liquids, or solids (i.e. discharge pollutants)                                                                                                            |          |          |                                       |             |
| 11                                                   | Will the waste generated during or after the project impact on neighboring surface or ground water?                                                                                                             |          |          |                                       |             |
| 12                                                   | Will the activity result in clearing of forest cover?                                                                                                                                                           |          |          |                                       |             |
| 13                                                   | Will the activity contribute to erosion?                                                                                                                                                                        |          |          |                                       |             |
| 14                                                   | Is the activity <u>in</u> compatible with existing land use in the vicinity?                                                                                                                                    |          |          |                                       |             |
| 15                                                   | Will the activity contribute to displace housing?                                                                                                                                                               |          |          |                                       |             |
| 16                                                   | Will the activity affect unique geologic or physical features?                                                                                                                                                  |          |          |                                       |             |
| 17                                                   | Will the activity contribute to change in the amount of surface water in any body?                                                                                                                              |          |          |                                       |             |
| 18                                                   | Will the activity deal with mangroves and coral reefs?                                                                                                                                                          |          |          |                                       |             |
| 19                                                   | Will the activity expose people or property to flooding?                                                                                                                                                        |          |          |                                       |             |
| 20                                                   | Will the activity contribute substantial reduction in the amount of ground water otherwise available for public water supplies?                                                                                 |          |          |                                       |             |
| 21                                                   | Will the activity create objectionable odors?                                                                                                                                                                   |          |          |                                       |             |
| 22                                                   | Will the activity violate air standards?                                                                                                                                                                        |          |          |                                       |             |
| <b>ENVIRONMENT &amp; HEALTH</b>                      |                                                                                                                                                                                                                 |          |          |                                       |             |
| 23                                                   | Will the project activities create conditions encouraging an increase of waterborne diseases or populations of disease carrying vectors?                                                                        |          |          |                                       |             |
| 24                                                   | Will the activity need ongoing maintenance once completed (for road rehabilitation as well as water and sanitation grants, maintenance plans are usually required)?                                             |          |          |                                       |             |
| 25                                                   | Will the activity generate hazards or barriers for pedestrians, motorists or persons with disabilities?                                                                                                         |          |          |                                       |             |
| 26                                                   | Will the activity increase existing noise levels?                                                                                                                                                               |          |          |                                       |             |
| 27                                                   | Will the project involve the disposal of syringes, gauzes, gloves and other biohazard medical waste?                                                                                                            |          |          |                                       |             |

|                               |                                                                                                    |  |  |     |     |
|-------------------------------|----------------------------------------------------------------------------------------------------|--|--|-----|-----|
| 28                            | Is the activity incompatible with existing land use?                                               |  |  |     |     |
| <b>LOCAL PLANNING PERMITS</b> |                                                                                                    |  |  |     |     |
| 29                            | Does the activity e.g. infrastructure improvements, require local planning permission(s)?          |  |  | N/A | N/A |
| 30                            | Does the activity meet the national building code (e.g. infrastructure improvements)?              |  |  | N/A | N/A |
| <b>GENDER<sup>5</sup></b>     |                                                                                                    |  |  |     |     |
| 31                            | Do men and women benefit disproportionately or are involved unequally in the project's activities? |  |  |     |     |
| 32                            | Does the project activity inhibit the equal involvement of men and women?                          |  |  |     |     |
| 33                            | Are there factors that prevent women's participation in the project?                               |  |  |     |     |

| <b>RECOMMENDED ACTION</b> ( <i>Check Appropriate Action</i> ): |                                                                                                                                                                                                                                              |  |  |  | (Check) |
|----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|---------|
| (a)                                                            | The project has no potential for substantial adverse environmental effects. No further environmental review is required (Categorical Exclusion). No EMPR required.                                                                           |  |  |  |         |
| (b)                                                            | The project has potential for minimal to medium adverse environmental effects, but mitigable environmental effects. Measures to mitigate environmental effects will be incorporated (Negative Determination with Conditions). EMPR Required. |  |  |  |         |
| (c)                                                            | The project has potentially substantial or significant adverse environmental effects, but requires more analysis to form a conclusion. An Environmental Assessment will be prepared (Positive Determination). No EMPR required.              |  |  |  |         |
| (d)                                                            | The project has potentially substantial adverse environmental effects, and revisions to the project design or location or the development of new alternatives is required (Deferral).                                                        |  |  |  |         |
| (e)                                                            | The project has substantial and unmitigable adverse environmental effects. Mitigation is insufficient to eliminate these effects and alternatives are not feasible. The project is not recommended for funding.                              |  |  |  |         |

<sup>1</sup> Construction projects need to be reviewed for scale, planned use, building code needs and maintenance. Some small construction projects, such as building an entrance sign to a park, may require simple mitigations whereas larger buildings will require more extensive review and monitoring.

<sup>2</sup> New construction of roads and trails will require a full environmental assessment of the planned construction, i.e. a Positive Determination.

<sup>3</sup> The planned involvement of pesticides will trigger the need to develop a Supplemental Initial Environmental Examination that meets USAID pesticide procedures (Pesticide Evaluation Report and Safer Use Action Plan or "PERSUAP") for the project.

<sup>4</sup> Any activities that involve harvesting trees or converting forests will require a full environmental assessment of the activity (i.e. Positive Determination).

<sup>5</sup> A positive response to gender questions requires follow up only when there are other positive responses on questions 1 – 30, and an EMPR is developed.

### III-B. Identification of Mitigation Plan (Table 2)

→ Enter the Question/Row # of the potential negative impacts with check marks in Column A (Table 1) and complete table below for mitigation measures to reduce or eliminate the issue. In the Sub-Activity or Component Column, list the main actions to be implemented. Under each action, list the tasks (Steps) that are needed to implement this action.

| # | Sub-activity or component | Description of Impact | Mitigation Measures |
|---|---------------------------|-----------------------|---------------------|
| 1 | Component 1               |                       |                     |
|   | <i>Step 1</i>             |                       |                     |
|   | <i>Step 2</i>             |                       |                     |
|   | <i>Step 3</i>             |                       |                     |
| 2 | Component 2               |                       |                     |
|   | <i>Step 1</i>             |                       |                     |
|   | <i>Step 2</i>             |                       |                     |
|   | <i>Step 3</i>             |                       |                     |
|   |                           |                       |                     |

\* provide overview of measures used from the USAID LAC Environmental Guidelines or other pertinent guidelines, details on exact monitoring plan are illustrated in Table 3, Environmental Monitoring and Evaluation Tracking Table.

### III-C. Environmental Monitoring and Evaluation Tracking Table (Table 3).

|                            |       |
|----------------------------|-------|
| Type of Project:           |       |
| Project Name:              |       |
| Implementing Organization: |       |
| Location Name:             |       |
| Project Size:              |       |
| Nearby Communities:        |       |
| Senior Project Manager:    | Date: |
| Monitoring Period:         |       |

| # | Description of Mitigation Measure | Responsible Party | Monitoring Methods |         |           | Estimated Cost | Results         |                      |                          | Recommended Adjustments |
|---|-----------------------------------|-------------------|--------------------|---------|-----------|----------------|-----------------|----------------------|--------------------------|-------------------------|
|   |                                   |                   | Indicators         | Methods | Frequency |                | Dates Monitored | Problems Encountered | Mitigation Effectiveness |                         |
| 1 |                                   |                   |                    |         |           |                | 1               |                      |                          |                         |
|   |                                   |                   |                    |         |           |                | 2               |                      |                          |                         |
|   |                                   |                   |                    |         |           |                | 3               |                      |                          |                         |
|   |                                   |                   |                    |         |           |                | 4               |                      |                          |                         |
| 2 |                                   |                   |                    |         |           |                | 1               |                      |                          |                         |
|   |                                   |                   |                    |         |           |                | 2               |                      |                          |                         |
|   |                                   |                   |                    |         |           |                | 3               |                      |                          |                         |
|   |                                   |                   |                    |         |           |                | 4               |                      |                          |                         |
| 3 |                                   |                   |                    |         |           |                | 1               |                      |                          |                         |
|   |                                   |                   |                    |         |           |                | 2               |                      |                          |                         |
|   |                                   |                   |                    |         |           |                | 3               |                      |                          |                         |
|   |                                   |                   |                    |         |           |                | 4               |                      |                          |                         |
| 4 |                                   |                   |                    |         |           |                | 1               |                      |                          |                         |
|   |                                   |                   |                    |         |           |                | 2               |                      |                          |                         |
|   |                                   |                   |                    |         |           |                | 3               |                      |                          |                         |