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# INITIAL ENVIRONMENTAL EXAMINATION (IEE)

**PROGRAM/ACTIVITY DATA:**

**Country:** Nepal

**Objective:** The objective of the program is to enhance disaster resilience and recovery in Nepal through the reconstruction of community infrastructure.

**Project Name:** Infrastructure Reconstruction Project

**Funding Begins:** FY2015 **Funding Ends:** FY2021

**LOP Amount:** $302 million **Program/Activities duration:** Oct 2015 to Sep 2024

**IEE Amendment (Yes/No):** No If "yes", Filename & date of original IEE; _____

**ENVIRONMENTAL ACTION RECOMMENDED:** (Place X where applicable)

| | | | |
|---|---|---|---|
| Categorical Exclusion | [X] | Positive Determination | [ ] |
| Negative Determination (with conditions | [X] | Deferral | [ ] |
| | | Exemption | [ ] |

**IEE Prepared By:** Latif Ur Rahman **Date:** 09/30/2015

**APPROVAL OF ENVIRONMENTAL ACTION RECOMMENDED:**

Beth Dunford, Mission Director, USAID/Nepal Date: 12/10/15

**CONCURRENCE:**

William Gibson, Bureau Environmental Officer:

Approved: _____ Date: December 17, 2015

Disapproved: _____ Date: _____

# 1. BACKGROUND AND ACTIVITY/PROGRAM DESCRIPTION

## 1.1 Purpose and Scope of IEE

The purpose of this Initial Environmental Examination (IEE), in accordance with 22 CFR 216, is to provide the first review of the reasonably foreseeable environmental effects and recommend Threshold Decisions, for reconstruction and technical assistance activities under the Infrastructure Reconstruction Project. This IEE provides a brief statement of the factual basis for Threshold Decisions and lays out the process of how individual projects and activities will conform to the local environmental laws and regulations, in addition to compliance with 22 CFR 216.

## 1.2 Background

On April 25, 2015 a 7.8 magnitude earthquake struck central Nepal. The earthquake and its aftershocks caused about 9,000 deaths and some 25,000 injuries. Over 664 health facilities were destroyed while an estimated 8,200 public schools were affected. The enormous scale of physical destruction and displacement of hundreds of thousands has created significant challenges for all involved in relief and recovery efforts. According to the Government of Nepal's (GON) Post-Disaster Needs Assessment (PDNA) in June 2015, the total damages and losses resulting from the earthquake is about $7 billion, and the reconstruction needs amount to around $6.7 billion.

Based on the PDNA and discussions with Nepal's National Authority for Reconstruction (NAR) and concerned ministries and departments, the proposed project will work with relevant stakeholders, including other donor agencies, to address reconstruction needs. In addition, the technical assistance will also be provided to build the disaster resilience capacity of government agencies and local communities.

## 1.3 Description of Activities/Program

The objective of the program is to enhance disaster resilience and recovery in Nepal through the reconstruction of public infrastructure.

USAID is working with the GON and other donor agencies to identify infrastructure reconstruction needs. Based on the discussions and coordination meetings, the reconstruction of education and healthcare facilities are amongst the first priorities of GON; these sectors also align with USAID/Nepal's development portfolio. However, it remains possible that additional needs will arise in other sectors. The following is a description of the anticipated activities/projects:

A. As a part of USG response to the earthquake of April 25, 2015, USAID is planning to reconstruct a Primary Health Care Center (PHCC) in Bahrabise, which is located in Sindhupalchok District. The reconstruction of this health facility will be implemented through a Participatory Agency Program Agreement (PAPA) between USAID and U.S. Army Corps of Engineers (USACE). USACE will perform the inherently governmental functions of contracting out, managing and monitoring the design, and construction oversight. The activity is expected to start in December 2016 and will complete in July 2018. The total estimated cost of the facility is about $2 million.

The proposed facility will provide service to a surrounding population of approximately 80,000 persons, with a visitation rate of approximately 80-100 patients/day. The facility will also be provided with continuous drinking water supply, on-site sanitation, and other utility services. As per preliminary designs, the approximately covered area would be in the range of 15,000 to 20,000 square feet. Most of the reconstruction would occur on the existing footprint of the collapsed building and on the land currently owned by the Government of Nepal. USAID will provide funding for furniture and basic equipment in addition to the construction of the proposed health facility. The PHCC will offer a range of services, including family planning, maternal/child health, immunization, outpatient surgeries, gynecological/obstetric, and trauma services.

B. USAID/Nepal is also planning to implement a public infrastructure reconstruction program through an Indefinite Delivery Indefinite Quantity (IDIQ) contract with an integrated approach to provide technical assistance; engineering and construction services; management and oversight; and procurement of equipment, furnishing, and other basic commodities. USAID/Nepal may also issue task orders under the new Global A&E II IDIQ out of E/3, especially if task orders are needed solely for A-E services. Based on the needs of GON, the reconstruction of health, education, and other public facilities will be prioritized. However, construction/rehabilitation needs may also arise in other sectors such as but not limited to, water, sanitation, irrigation, electricity, and transportation. The activities will be implemented in the disaster-affected areas throughout Nepal. The estimated ceiling of these activities is $300 million and the award is expected in September 2016 with a five-year ordering period, with performance periods to end no later than three years after the end of the ordering period.

   According to the preliminary designs GON for health and education facilities, the estimated covered area may range from 5,000 to 15,000 sq ft. As mentioned above, most of the reconstruction would be on the existing foot print of the collapse building with the addition of some facilities and associated services. In addition, the facilities will also be provided with basic equipment and furniture.

C. USAID/Nepal may also procure third-party Quality Assurance services to assist in monitoring the activities above.

## 2. COUNTRY & ENVIRONMENTAL INFORMATION (BASELINE INFORMATION)

There are three ecological regions in Nepal. These are the Terai, low lying plains bordering the northern belt of India; the mid-hill areas running north-south at altitudes ranging between 2,000 to 4,500 meters; and the mountainous areas that include the Himalayan mountain ranges in the north.

Nepal is recognized as highly vulnerable to a range of seismic and hydro-meteorological hazards. All of Nepal is exposed to significant earthquake hazard resulting from the convergence of the Indian tectonic plate with the Eurasian plate that also drives the

uplift of the Himalayan mountain range. During the 1934 M8.2 Nepal-Bihar earthquake, which had an epicenter 175 km from Kathmandu, almost all buildings collapsed in Kathmandu, Bhaktapur, and Patan. Casualties were estimated to be as high as 12,000. Other major earthquakes were recorded in 1897, 1905, 1934, 1950, and 1988.

The country is drought prone as well as susceptible to floods and landslides. Nepal is ranked as the 11th most vulnerable country in the world to earthquakes and 30th to flood risks. In the rainy season, a vast section of the population suffers from flood-related disasters that claim numerous lives and cause irreparable damage to public property. Nepal's flooding predicament and susceptibility is expected to be exacerbated by the impacts of climate change. The recurrence of high intensity rainfall during monsoon causes floods in the low land regions that claim an average of 200 lives annually in the past five years. In addition, due to Nepal's rugged mountain topography, steep slopes, fragile geology, and extreme terrain conditions, the country faces several other major hazards such as storms, avalanches, and Glacial Lake Outburst Floods.

Combining these hazards and the high level of vulnerability, the country is ranked second in the world to mortality risk from two or more hazards. About 80 percent of its geographic area is at risk from multiple natural hazards with the vast majority of the population inhabiting these high-risk areas. Because of these hazards, the country is susceptible to very high losses from disaster, both in terms of mortality as well as percent GDP loss.

## 3. NATIONAL ENVIRONMENTAL LEGISLATIONS

In an attempt to legalize the environmental integration of development projects, the Government of Nepal (GON) has enforced the Environmental Impact Assessment Guidelines 1993[1]; Environmental Protection Act 1997[2]; Environmental Protection Rules 1997 (amended in 1998 and 1999)[3]. The Guidelines, Act, Rules, and other regulations provide the basic legal framework for all environmental assessment in Nepal with the aim:

- To manage natural and physical resources efficiently and sustainably,
- To balance development efforts and environmental conservation to fulfill the basic needs of the people in a sustainable manner,
- To safeguard national heritage,
- To mitigate the adverse environmental impacts of development projects and human actions, and
- To integrate the environment and development through appropriate institutions, adequate legislation and economic incentives, and sufficient public resources.

The following sub-sections provide a brief overview of the aforementioned Guidelines, Act, Rules, and other regulations.

### 3.1 National Environmental Impact Assessment Guidelines 1993

These guidelines were developed "to assess the environmental impacts likely to be caused by a project, and to promote its positive impacts and mitigate or eliminate

[1,2,3] http://moste.gov.np/legal_documents/Regulation

adverse impacts by undertaking preventive or other effective measures after integrating the environmental impacts in the planning cycle of all the projects to be initiated in the Kingdome of Nepal". The guidelines require screening all the activities of a project/program and determining whether an Initial Environmental Examination (IEE) or Environmental Impact Assessment (EIA) is required.

According to the guidelines, an IEE is required for those projects that are likely to cause known environmental impacts and that can be mitigated. All these projects are included in Schedule 1 of the guidelines. An EIA is required for those projects, as specified in Schedule 2, which have either known significant environmental impact or for which the environmental impacts are not clear.

### 3.2 Environment Protection Act 1997

The Parliament of Nepal passed an Act in 1997 for the protection of environment. The provisions are similar to the guidelines of 1993 that IEE or EIA is mandatory for the implementation of any development projects, but it provided a legal cover to enforce the already existing regulations. In addition, the Act made the approvals mandatory before doing any project, and provided recommendations to establish the Environment Protection Council, environment protection fund and laboratory; to appoint the environmental inspectors for environmental compliance; and authorized punishment for violating the environmental regulations.

### 3.3 Environment Protection Rules 1997 (amended in 1998 and 1999)

The Environmental Protection Rules are more comprehensive and added some additional requirements for both IEEs and EIAs. These additional requirements included the approvals of work schedules for IEE/EIAs; new formats for reporting; public advertisement of the proposed projects to seek public opinions of any potential or perceived impacts; monitoring and evaluation procedures; emission permits; definition of the roles and responsibilities for environmental inspectors and laboratories; and compensation provisions. In addition, Schedule 1 and 2 of the 1993 Guidelines were categorized by sectors such as forest, industry, mining, road, water resources and energy, and agriculture. Other schedules were added to define the requirements for the IEE/EIA work schedules and matters to be considered during the process.

The Guidelines, Act, and Rules require that either an IEE or EIA is required for any development project and provides guidance for some sectors. However, none of the existing regulations have specific guidance or requirements for the construction of small to medium scale public buildings such as education or healthcare facilities (with the exception of a 25 bed hospital under Schedule 2). From the review of the above regulations and the experience from other similar programs, it is concluded that small to medium scale public infrastructure facilities (as described in Section 1.3) are not likely to have significant environmental impacts. These activities could be covered by an IEE and the expected low to moderate level environmental impacts can be mitigated by sound environmental design, best management practices, and environmental monitoring.

## 4.0 EVALUATION OF ACTIVITIES/PROGRAM COMPONENTS WITH RESPECT TO ENVIRONMENTAL IMPACT POTENTIAL

### 4.1 Technical Assistance Activities

The reconstruction program will include technical assistance activities such as stakeholder engagement and meetings, architecture and engineering services, training programs, manual development for improved and safe construction practices, conducting quality assurance assessments, and furnishing and procuring basic equipment for the completed facilities. These will not have any adverse impact on the natural or physical environment and are therefore recommended for **Categorical Exclusion** as per 22 CFR 216.2 (c)(2)(i) which presents the following criterion: "education, technical assistance, or training programs except to the extent such programs include activities directly affecting the environment (such as construction of facilities);" and (c)(2) (iii) "which is related to analysis, studies and meetings."

### 4.2 Small to Medium Scale Construction/Rehabilitation Components

The activities described in Section 1.3 will primarily fall under the small to medium scale rehabilitation/reconstruction category. As these facilities will be re-built on the existing developed land (foot print), they are likely to have minor to moderate adverse environmental and social impacts. Therefore, these activities may qualify for **Negative Determination with Conditions** as per 22 CFR 216.3 (a) (3)(iii). The Conditions include, but are not limited to, environmentally sound design, Monitoring and Evaluation (M&E), and Best Management Practices (BMP) to minimize erosion and debris and waste production, and proper disposal of debris and waste including medical waste to prevent transmission of disease through infectious waste Please see to Section 5.2 for additional information.

In case of the Bahrabise PHCC and other health facilities reconstruction, USAID requires the implementing partner to follow the standards of medical waste management as developed by the Ministry of Health and Population. The contractors and implementing partners must work with USAID to develop and implement an environmental screening checklist, and in monitoring and evaluating the individual construction projects/activities to ensure implementation of sound environmental design and BMPs. The checklist shall be site-specific and shall identify mitigation measures and BMPs that shall be implemented. As a result of data collected through the check list, the contractors and partners must prepare Environmental Documentation Forms (EDF) and Environmental Monitoring and Mitigation Plans (EMMP) to document all the potential impacts and suggested mitigation and monitoring measures. These documents must include the procedures for identifying the activities, identify and evaluate the impacts, suggest mitigation and monitoring measures with associated budget, and assign responsibilities to implement these and monitor environmental compliance.

In addition, if the sustainability of an activity or project requires the participation of concerned GON department, it is recommended that the concerned department shall sign an agreement to take responsibility for sustaining the activity/projects through long-term operation and maintenance and other appropriate actions. Local communities should be consulted and involved, in a gender sensitive and socially inclusive manner, throughout the environmental compliance procedures laid out in this IEE as appropriate. USAID Contracting Officer's Representative (COR) and the Mission Environmental

Officer (MEO) will have the oversight and M&E responsibility during design, construction, and start-up.

### 4.3 Medium to Large Scale Construction/Rehabilitation Components

Medium to large-scale construction and rehabilitation of new facilities (not covered under small to medium-scale construction activities above) within a newly developed land/or alignment is expected to have significant adverse environmental impacts. For such medium to large scale new reconstruction/rehabilitation and physical upgrading components, a **Positive Threshold Decision** may apply as per 22 CFR 216.3 (a) (2) (iii). Therefore, an Environmental Assessment as per 22CFR 216.6 or an Environmental Impact Statement as per 22CFR 216.7 may be required.

The EIA process is established here:

- A Scope of Work for an Environmental and Social Impact Assessment (ESIA), which should also include climate vulnerability screening and public consultation, shall be consistent with the GON legislation and shall be reviewed and approved by the BEO/Asia.
- A Scoping Statement, which should be accompanied by public consultation, shall be reviewed and approved by the BEO/Asia and by duly national environmental authority.
- The ESIA assessment report, which should be accompanied by public consultation, shall be reviewed and approved by the BEO/Asia and by duly national environmental authority.

The contractors/implementing partners shall seek guidance from the COR and MEO regarding circumstances that trigger preparation of an ESIA beyond those stipulated in the GON legislation.

## 5. RECOMMENDED DETERMINATIONS AND MITIGATION ACTIONS (INCLUDING MONITORING AND EVALUATION)

**5.1** Pursuant to 22 CFR 216.2(c)(2)(i) and (iii), **Categorical Exclusion (CE)** is recommended for stakeholder engagement, meetings, architecture and engineering services, training programs, manual development for improved and safe construction practices, basic furnishings and commodities (predominantly medical equipment) s these will not have any adverse impact on the natural or physical environment. The manuals shall be reviewed by COR and MEO.

**5.2** Pursuant to CFR 216.3(a) (2)(iii), a **Negative Determination with Conditions** is recommended for small to medium scale construction/rehabilitation activities (as described in Section 1.3) on the existing developed lands that may have potentially minor to moderate adverse impacts on the physical and natural environment. The conditions being environmentally sound design, monitoring and evaluation (M&E), and best management practices to minimize erosion and debris and waste production and proper disposal of debris and waste including medical waste to prevent transmission of disease through infectious waste. Adequate measures will be taken to ensure the proper handling, storage and disposal of medical supplies,

including medical equipment. The COR and MEO shall coordinate with the relevant implementing partners to ensure that: (see also added condition on page 12 below)

1. All activities will be implemented in accordance with best practice guidance provided in the Asia environmental guidelines at www.usaid.gov/our_work/environment/compliance/ane/guidelines.htm; **and** http://www.usaidgems.org/bestPractice.htm
2. All construction, rehabilitation, and renovation activities will be conducted in accordance with Nepal Environmental Impact Assessment Guidelines 1993; Environmental Protection Act 1997; Environmental Protection Rules 1997 (revised in 1998 and 1999) and construction norms and standards (and in their absence in accordance with the best international practice appropriate to the seismicity levels in Nepal and in the respective districts; these should be acceptable to USAID).
3. The implementing partners shall minimize the use of, and properly dispose of, hazardous materials and wastes for the small-medium scale construction activities. The implementing partners will adhere to USEPA guidance at www.epa.gov/asbestos and www.epa.gov/lead/pubs/renovation.htm for dealing with asbestos and lead. The implementing partners will screen all such projects/activities for potential environmental impacts by preparing an Environmental Document Form (EDF) (**Attachment 1**). The implementing partners shall prepare Environmental Mitigation and Monitoring Plan (EMMP) (**Attachment 2**) for all moderate risk activities and will monitor implementation to ensure enforcement of the mitigating measures. The COR and MEO will ensure that implementing partners have sufficient environmental capabilities on their teams. All such reviews and conditions will be documented, reviewed, and maintained in project files.

   The following additional references could help in the preparation of EMMP.

   - Environmental Guidelines for Small-Scale Activities: (**http://www.usaid.gov/locations/latin_america_caribbean/environment/docs/epiq/epiq.html** and **http://www.usaidgems.org/bestPractice.htm**)
   - ERBD Sub-Sectoral Environmental and Social Guidelines: **http://www.ebrd.com/about/policies/enviro/sectoral/**
   - Environmental Handbook, German BMZ: **http://ces.iisc.ernet.in/energy/HC270799/HDL/ENV/enven/begin2.htm#Volume%20II:%20Agriculture,%20mining-energy,%20trade-industry** **http://ces.iisc.ernet.in/energy/HC270799/HDL/ENV/enven/begin1.htm#Volume%20I**, **http://ces.iisc.ernet.in/energy/HC270799/HDL/ENV/enven/begin2.htm#Volume%20II:%20Agriculture,%20mining-energy,%20trade-industry**
4. The implementing partners shall seek USAID's review and approval of all design documents, which shall be adapted to seismic levels in the area and take into account other aspects of natural conditions and climate change.
5. The implementing partners shall test all sources of potable water supply and ensure that they meet GON and WHO standards, and USG standards for

arsenic. The additional guidance on WASH is available in the Environmental Guidelines for Water Supply and Sanitation ( http://www.usaidgems.org/Sectors/watsan.htm)

6. The implementing partners will adhere to the standard conditions for small to medium scale construction, water and sanitation, operations and maintenance of healthcare and education facilities as provided at **Attachment 3**. Additional information on sector guidelines (WASH, construction, schools, etc.) from USAID is available at: http://www.usaidgems.org/sectorGuidelines.htm.
7. The implementing partners will include environment compliance considerations into all aspects of the project implementation and will promote and train local counterparts on environmental requirements and standards across all of the project's activities; such proposed activities will be included in annual work plans, and results will be reported in annual reports.
8. The implementing partners shall seek concurrence from the national duly authorized environmental agency on framework environment mitigation and monitoring plan.
9. All the implementing partners will include a requirement to follow all recommendations of this IEE, including completed EDF, a FEMMP, site specific mitigation and monitoring plans, and mitigation and monitoring reports; the implementing partners will be responsible for training their staff and subcontractors on the contract's environmental requirements and for ensuring their compliance with these requirements.
10. The implementing partners will adhere to USAID's general policies on commodity eligibility provided at http://www.usaid.gov/policy/ads/300/31251m.pdf and will not finance unsafe or ineffective products, such as certain pesticides, food products, or pharmaceuticals and other commodities not eligible for financing under this policy.
11. When equipment (such as computers) is procured, at the end of its life it should be disposed in an environmental safe manner by a certified company in accordance with local laws, and in their absence, in accordance with international best practice acceptable to USAID (alternatively, when procuring equipment from a licensed provider/dealer an agreement may be reached that such equipment will be returned to the dealer for its environmentally safe disposal).
12. The implementing partners) shall document and regularly report to USAID on the implementation of the Negative Determination with Conditions activities; reporting will include photographic documentation and site visit reports confirming implementation of the agreed EMMP.
13. The Implementing partner shall adhere to the National Medical Standard for Reproductive Health Volume I for health care waste disposal management standards (including such things as placenta pits, incinerators, or other relevant waste disposal mediums). Proper infection control measures are required for sharp objects and medical waste through separation into designated containers, and final safe disposal through low-impact incinerators, burial or the other methods as relevant to the item and location. The national standards lay out the following procedure/protocol for protective barriers: Handwashing, wearing gloves and surgical attire, using antiseptic solution-indication, selection of and

storage and dispensing of antiseptics, processing equipments, instrument and other linen-includes the steps in the processing instruments like decontamination, cleaning, high level disinfection or sterilization and storage, managing clinical waste-disposal of waste, etc. The Implementing partner is required to review and obtain approval from the Agreement Officer's Representative/Project Manager for each type of safe disposal method. The additional guidances on health care facilities are available, as follows

- Environmental Guidelines for health care facilities( http://www.usaidgems.org/Sectors/healthcareFacilities.htm)
- Environmental Guidelines for health care waste (http://www.usaidgems.org/Sectors/healthcareWaste.htm)

**6. LIMITATIONS OF THE IEE:** This program doesn't cover activities (and therefore should changes in scope implicate any of the issues/activities listed below, a BEO-approved amendment will be required), that:

i. Normally have a significant effect on the environment under 22 Code of Federal Regulations 216.2(d)(1) [See http://www.usaid.gov/our_work/environment/compliance/regulations.html];
ii. Affect endangered species;
iii. Result in wetland or biodiversity degradation or loss;
iv. Support extractive industries (e.g. mining and quarrying);
v. Promote timber harvesting;
vi. Provide support for regulatory permitting;
vii. Assist the procurement (including payment in kind, donations, guarantees of credit) or use (including handling, transport, fuel for transport, storage, mixing, loading, application, cleanup of spray equipment, and disposal) of pesticides or activities involving procurement, transport, use, storage, or disposal of toxic materials and /or pesticides (cover all insecticides, fungicides, rodenticides, etc. covered under the Federal Insecticide, Fungicide, and Rodenticide Act);
viii. Procure or use genetically modified organisms;
ix. Procure or use of non-native, potentially invasive species;
x. Procure or use Asbestos, Lead, Mercury Containing Materials (ALMCM) (i.e. piping, roofing, etc.), Polychlorinated Biphenyls (PCB) or other toxic/hazardous materials prohibited by US EPA as provided at: http://www.epa.gov/asbestos and/or under international environmental agreements and conventions, e.g. Stockholm Convention on Persistent Organic Pollutants, as provided at: http://chm.pops.int
xi. Procurement or use, or both, of pesticides requires preparation of a Pesticide Evaluation Report and Safe Use Action Plan (PERSUAP). PERSUAP shall be approved by the BEO/Asia.

## 7. REVISIONS

As with all USAID funded projects and pursuant to 22 CFR 216.3 (a) (9), if new information becomes available which indicates that any of the proposed actions to be funded under this activity might be "major" and their effects "significant", the threshold decisions for those actions will be reviewed and revised by the MEO and an

environmental assessment prepared, as appropriate. It is the responsibility of the COR to timely inform the MEO and BEO of any changes in the scope and nature of the approved activities that may require the revision of the approved Threshold Decision.

**CLEARANCES AND APPROVAL OF RECOMMENDED ENVIRONMENTAL ACTIONS:**

**Initial Environmental Examination (IEE) for Infrastructure Reconstruction Project**

Laureen Reagan
Director, DR4 _____ Date: _____

Daniel Sinclair, Deputy Director,
HEO _____ Date: _____

Shanker Khagi, MEO _____ Date: _____

Andrei Barannik,
Regional Environmental
Advisor/SCA & OAPA Cleared by email* Date: December 17, 2015

* with the added condition that all applicable conditions are transposed into procurement instruments and that COR and MEO meet with IP's team before initiation of the activity to explain the IEE conditions.

Paul Kim, RLA _____ Date: _____

Amy Tohill-Stull, DMD _____ Date: _____

CC'd:

- Project File
- MEO Tracking
- OAA
- RLA

Cleared as part of package - electronic clearance attached.

## Attachment 1: Illustrative Environmental Documentation Form

**[INSERT PROJECT/ACTIVTY NAME]**

**A. Applicant information**

| | |
|---|---|
| Contractor/grantee(organization) | Parent grant or project |
| individual contact and title | Address, phone and email (if available) |
| activity (brief description) | Amount |
| Location of activity | Start and end date of activity |

**B. Activities, screening results, and recommended determination**

| TABLE 1<br><br>Proposed Sub-activities | Screening result | | | Recommended Determinations | | |
|---|---|---|---|---|---|---|
| | Very Low Risk | Moderate Risk | High Risk | No significant adverse impact | With specified mitigation, no significant adverse impact, | Significant Adverse impact |
| 1. | | | | | | |
| 2. | | | | | | |
| 3. | | | | | | |
| 4. | | | | | | |
| 5. | | | | | | |
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| 10. | | | | | | |
| | | | | | | |

(Continue on additional page if necessary)

**C. Summary of recommended determinations (check all that apply)**

| | The activity contains. . . | *(equivalent regulation 216 terminology)* |
|---|---|---|
| ☐ | Very low risk sub-activities | *categorical exclusion(s)* |
| ☐ | After environmental review, sub-activities determined to have **no significant adverse impacts** | *negative determination(s)* |
| ☐ | After environmental review, sub-activities determined to have **no significant adverse impacts, given appropriate mitigation and monitoring** | *negative determination(s) with conditions* |
| ☐ | After environmental review, sub-activities determined to have **significant adverse impacts** | *positive determination(s)* |

**D. Certification:**

I, the undersigned, certify that:

1. The information on this form is correct and complete

2. The following actions have been and will be taken to assure that the activity complies with environmental requirements established for the **INSERT PROJECT NAME** under the Code of Federal Regulations 22 CFR 216:

   These design elements and best practices will be followed in implementing this activity, except with the approval of USAID.

   Any specific mitigation or monitoring measures described in the attached information will be implemented in their entirety.

   Compliance with these conditions will be regularly confirmed and documented by on-site inspections during the activity and at its completion.

_____ _____

Name and Signature of the Implementing partner (Date)

**BELOW THIS LINE FOR USAID USE ONLY**

**Approval**

| | | |
|---|---|---|
| USAID COR<br>☐ Approved<br>☐ Rejected | (print name) | (signature) |
| USAID MEO or DMEO<br>☐ Approved<br>☐ Rejected | (print name) | (signature) |

**USAID comments: (if documentation is rejected, comments must be provided to applicant)**

## Attachment 2: Environmental Mitigation and Monitoring Plan (EMMP)

- An EMMP should either be included in or developed for (1) **all IEEs** that have at least one "Negative Determination with Conditions" (or for activities for which an environmental review has been completed pursuant to an IEE requirement) and (2) all Environmental Assessments (EAs).
- If the EMMP is not developed as part of the IEE, the implementing partner should usually lead development of the EMMP, subject to review and oversight by the MEO and Program Manager.
- In all cases, the tasks identified in the EMMP are incorporated into the implementing partner's Work Plan, budget, and reporting.
- The following EMMP format is recommended. It can be adapted, as necessary.

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**Environmental Mitigation and Monitoring Plan**

**Activity Title:**

**Implementing Partner:**

| Activity | Mitigation Measure(s) | Monitoring Indicator(s) | Monitoring and Reporting Frequency | Party(ies) Responsible | Indicative Budget |
|---|---|---|---|---|---|
| List all activities in IEE that received a "negative determination with conditions."<br><br>*Do not list any other activities in separate rows.* | If mitigation measures are well-specified in the IEE, quote directly from IEE<br><br>If they are not well-specified in the IEE, define more specifically here. | Specify indicators to (1) determine if mitigation is in place and (2) successful.<br><br>For example, visual inspections for seepage around pit latrine; sedimentation at stream crossings, etc.) | For example:<br><br>"Monitor weekly, and report in quarterly reports. If XXX occurs, immediately inform USAID activity manager." | If appropriate, *separately* specify the parties responsible for mitigation, for monitoring and for reporting. | |
| | | | | | |
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## Attachment 3: Standard Conditions for Small-Scale Construction

Small-scale construction activities occur in association with a wide variety of development projects financed by USAID. Construction activities include demolition; site clearing; soil grading, leveling and compaction; excavation; pipe and equipment installation; and the erection of physical structures. These activities have the potential to result in significant adverse environmental impacts, but most of those impacts can be mitigated down to acceptable levels through the use of good construction management practices.

These standard conditions have been developed to ensure that small-scale construction activities do not result in significant adverse environmental impact. When adherence to these conditions is required as a condition of small-scale construction contracts, no significant adverse environmental impact is presumed to result from activity implementation. Project officers, Program Manager, activity manager, Mission Environmental Officers, Contract Officers and implementing organizations must nonetheless be aware that these standard conditions are generic in nature, and that additional potentially significant adverse environmental impacts may be associated with small-scale construction activities. ***It is the responsibility of the individual USAID missions, and/or their implementing contractors and grantees, to monitor construction and to ensure that significant adverse environmental impacts do not result from these programs.***

For the purposes of this guidance, "small-scale" construction activities are defined here as those that cost less than $200,000 per construction project component. Because of the exceptionally diverse physical conditions under which Bureau construction activities take place and the very broad kinds of construction that take place, the following standard conditions are to be followed "as practicable and appropriate."

**Standard Conditions for Small-Scale Construction Projects**

- Establish and adhere to construction timetables that minimize disruption to the normal activities of the construction area.
- Coordinate truck and other construction activity to minimize noise, traffic disruption and dust.
- Develop and implement appropriate human health and worker safety measures during construction.
- Post construction timetables and traffic diversion schedules at the project site.
- Where significant environmental impacts may occur, document and photograph pre-construction and post-construction conditions.
- Avoid subsidence and building stabilization problems through proper foundation excavation, fill placement and borrow pit management.
- Fill should avoid pockets of segregated materials, it should use well-graded materials, and it should be compacted to recognized standards.
- Backfill and/or restore borrow areas and quarries before abandonment unless alternative uses for those sites are planned.
- Control runoff into borrow pits.
- Provide temporary sanitation at the construction site.
- Recover and replant topsoil and plants as practicable.
- Set protocols for vehicle maintenance to control contamination by grease, oil and fuels.
- Install temporary erosion control and sediment retention measures when permanent ones either are not feasible or are delayed.
- Avoid pollution of waterways with stockpiled construction materials.

- Cover stockpiled construction materials, as practicable.
- Place solvents, lubricants, oils, and other semi-hazardous and hazardous liquids over a lined area with appropriate secondary containment in order to contain spillage. Test the integrity of bulk storage tanks and drums, and secure valves on oil and fuel supplies.
- Build appropriate containment structures around bulk storage tanks and materials stores to prevent spillage entering watercourses.
- Handle, store, use and process branded materials in accordance with manufacturer's instructions and recommendations.
- Take waste materials to appropriate, designated local disposal areas.
- Avoid the use of cement; paper; board; sealant and glazing formulations; piping; roofing material; or other materials containing asbestos.
- Do not use PCBs in electric transformers.
- Avoid sealant and glazing formulations that use lead as a drying agent.
- Use lead-free paint, primers, varnishes and stains.
- Minimize the use of solvent-based paints, or replace with water-based materials.
- Minimize burning of waste materials.
- Employ techniques to minimize dust and vapor emissions as practicable (e.g., road speed limits, air extraction equipment, scaffolding covers, road spray).
- Recycle wastewater to the extent practicable.
- Build tanks or other separators for silt-laden material prior to allowing significant outflow into watercourses.
- Build collection channels leading to oil and/or silt traps, particularly around areas used for vehicle washing or fuelling.
- Seal or remove abandoned drains to minimize water contamination.
- Segregate waste which can be salvaged, re-used or recycled.
- Introduce measures to control and minimize the volume of waste on site.
- Employ sensitive strategies with regard to trees, watercourses, plant or animal species or habitats, and important historical and archaeological features.
- As practicable, landscape construction sites in a way that is appropriate to local conditions.
- Minimize the disturbance of, and reduce the spread of, ground contaminants.
- Do not build structures in sensitive areas such as wetlands.
- If waste will be buried on site, avoid siting burial pits up-gradient from drinking water sources such as wells. Pits should be lined with impermeable material (e.g., clay or polyethylene).
- If waste will be buried on site, avoid siting waste pits where water tables are high or underlying geology makes contamination of groundwater likely. If no alternative site is available, ensure that pits are lined with impermeable material.
- Provide for the safe disposal of gray water from bathing and washing.

**Additional Conditions to Minimize Impact of Parking Facility Construction**

- Compact substrate materials appropriately.
- Where applicable, apply sealant at earliest possible time to limit runoff from unsealed asphalt.
- Provide adequate drainage for the surface area to be paved.
- Return unpaved areas to original or improved contours following construction.
- Re-vegetate areas where vegetation was removed or destroyed during construction.
- Provide vegetation strips within parking lot where possible, including shade trees.

- Retain tree(s) along parking facility and adjacent roadsides.

**Standard Conditions for Small-Scale Water and Wastewater Activities**

USAID's Bureau for Asia finances, directly or indirectly, a large number of water and wastewater activities. These occur in both rural and urban areas, and in association with residential, commercial, industrial and medical facilities. Water and wastewater activities have the potential to result in significant adverse environmental impacts, but most of those impacts can be mitigated down to acceptable levels through the use of good siting, design, construction, operations and maintenance practices.

These standard conditions for small-scale water and wastewater activities have been developed by USAID's Asia Bureau to ensure that water and wastewater activities financed by the Bureau do not result in significant adverse environmental impact. When adherence to these conditions, as practical and appropriate, is required as a condition of water and wastewater contracts, no significant adverse environmental impact is presumed to result from activity implementation.

Project Officers, CTOs, Mission Environmental Officers, Contract Officers and implementing organizations must nonetheless be aware that these standard conditions are generic in nature, and that additional potentially significant adverse environmental impacts may be associated with water and wastewater activities. ***It is the responsibility of the individual USAID missions, and/or their implementing contractors and grantees, to monitor water and wastewater activities and to ensure that significant adverse environmental impacts do not result.***

For the purposes of this guidance, "small-scale" water and wastewater activities are defined as those that cost less than $200,000 per individual construction project. Because of the exceptionally diverse physical, biological and social environments under which Bureau water and wastewater projects take place, and the broad kinds of water and wastewater activities that are financed, these standard conditions are to be followed "as practicable and appropriate."

**Standard Conditions for Water and Wastewater Activities**

***Standard Siting Conditions***

- Site water supply facilities in a way that minimizes the potential for contamination, taking into account existing and likely future land use patterns in the water supply—i.e., wellhead protection, or upper watershed—area.
- Site wastewater facilities in a way that minimizes their potential for contaminating water supply sources, or for exposing human populations to water-borne contaminants.
- Avoid siting water supply and wastewater facilities in flood-prone areas.
- Do not site water and wastewater facilities on active faults or other areas where ground stability problems such as soil creep occur.
- Locate wastewater facilities downwind of local population.
- Build latrines and similar sanitation facilities down gradient of water supply wells. As necessary, evaluate depth to water table including seasonal fluctuations. Pit latrines should not be installed where the water table is shallow or the composition of the overlying deposits make groundwater vulnerable to contamination.
- Employ sensitive siting strategies that take into appropriate consideration impact on trees, wetlands and watercourses, important plant and animal habitat, and significant historical and archaeological resources. Avoid or mitigate adverse impacts to these resources.

***Standard Design Conditions***

- In general, design water supply facilities to protect water quality, minimize the potential for contamination, and minimize operation and maintenance costs.
- In general, design wastewater facilities to avoid contamination of water supplies and human exposure, and minimize operation and maintenance costs.
- In general, do not construct new wastewater pipelines unless treatment is provided at the outfall.
- Where latrines are installed, use improved ventilated pit designs that reduce insect vectors.

***Standard Construction Conditions***

- Establish and adhere to construction timetables that minimize disruption to the normal activities of the construction area.
- Post construction timetables and traffic diversion schedules at the project site.
- Coordinate truck and other construction activity to minimize noise, traffic disruption and dust.
- Develop and implement appropriate human health and worker safety measures during construction as well as during operation and maintenance phases.
- Where significant environmental impacts may occur, document and photograph pre-construction and post-construction conditions.
- Avoid subsidence and building stabilization problems through proper foundation excavation, fill placement and borrow pit management.
- Fill should avoid pockets of segregated materials, it should use well-graded materials, and it should be compacted to recognized standards.
- Backfill and/or restore borrow areas and quarries before abandonment unless alternative uses for those sites are planned.
- Control runoff into borrow pits.
- Install temporary erosion control and sediment retention measures when permanent ones either are not feasible or are delayed.
- Provide temporary sanitation at the construction site.
- Set protocols for vehicle maintenance to control contamination by grease, oil and fuels.
- Build collection channels leading to oil and/or silt traps, particularly around areas used for vehicle washing or fuelling.
- Build appropriate containment structures around bulk storage tanks and materials stores to prevent spillage entering watercourses.
- Build tanks or other separators for silt-laden material prior to allowing significant outflow into watercourses.
- Avoid pollution of waterways with stockpiled construction materials.
- Cover stockpiled construction materials, as practicable.
- Minimize the disturbance of, and reduce the spread of, ground contaminants.
- Handle, store, use and process branded materials in accordance with manufacturer's instructions and recommendations.
- Use lead-free paint, primers, varnishes and stains.
- Minimize the use of solvent-based paints.
- Introduce measures to control and minimize the volume of waste on site.
- Segregate waste that can be salvaged, re-used or recycled.
- Take waste materials to appropriate, designated local disposal areas.
- Minimize burning of waste materials.

- If waste will be buried on site, avoid siting burial pits up-gradient from drinking water sources such as wells. Pits should be lined with impermeable material.
- If waste to be buried on site, avoid siting waste pits where water tables are high or underlying geology makes contamination of groundwater likely. If no alternative site is available, ensure that pits are lined with impermeable material.
- Provide for the safe disposal of gray water from bathing and washing.
- Recycle wastewater to the extent practicable.
- Seal or remove abandoned drains to minimize water contamination.
- Use proper bedding materials for pipes, and backfill appropriately for the pipeline.
- Use riprap (cobbled stone), gravel, or concrete as needed to prevent erosion of drainage structures at the outfall of sanitation projects according to established standards.
- Monitor and repair leaks from cracked containment structures, broken pipes, faulty valves and similar structures.
- Do not use piping containing asbestos.
- Replace lead pipes and joints in drinking water delivery system.
- Provide proper wellhead protection against contaminant sources.
- Keep livestock from grazing immediately up-gradient of water supplies.
- Do not allow animals to drink directly from water sources, unless those sources are subsequently treated.
- In coastal areas, maintain withdrawals within safe yield limits to avoid salt water intrusion and well contamination.
- Ensure that spilled water/rainwater drain to a soak-way or equivalent structure.
- Monitor drains and soak-ways and keep clear of debris.
- Collect and dispose of sludge from wastewater treatment facilities at appropriate frequencies.
- Dispose of sludge in areas designated by local authorities.
- Recover and replant topsoil and plants as practicable.
- Re-vegetate areas damaged during construction. Do not remove erosion control measures until re-vegetation is completed.
- As practicable, landscape construction sites in a way that is appropriate to local conditions.

**Standard Operations and Maintenance Conditions**

- As a rule, financing for water and wastewater infrastructure improvements should not be provided unless appropriate operations and maintenance (O&M) provisions are in place.
- On larger projects, an O&M Manual should be prepared before water or wastewater system operations begin.
- Address financial and system power issues in O&M plans.

**Additional Standard Conditions for Health Clinics and Medical Facilities**

- Do not dispose of hazardous and chemical wastes to sewer systems.
- Collect and segregate waste from patients treated with cytotoxic drugs.
- Separate and disinfect stools from cholera patients prior to discharge.
- Disinfect blood before discharge to sewers unless there is an adequate wastewater treatment facility.
- Water-soluble, relatively mild pharmaceutical mixtures, such as vitamin solutions, cough syrups, intravenous solutions, eye drops, etc.—but not antibiotics—may be diluted with large amounts of water and then discharged to sewer systems that can handle them.

- Avoid burial of chemical wastes where there is potential for groundwater contamination.

| Timestamp | Username | Office | Clearance | Additional Comments |
|---|---|---|---|---|
| 10/27/2015 8:36:20 | shbaldwin@usaid.gov | OAA | Need to discuss | Many comments in agreement body. |
| 10/27/2015 9:54:17 | ssteimer@usaid.gov | HEO | Cleared without comments | - |
| 10/27/2015 11:49:22 | tacharya@usaid.gov | PPD | Cleared without comments | - |
| 10/27/2015 17:35:08 | mzeilinger@usaid.gov | - | Cleared without comments | Earlier comments on draft document have been accepted. Thank you. |
| 10/30/2015 6:51:45 | rcoleman@usaid.gov | OC | Cleared without comments | - |
| | | | | Pragya and I have made some changes to the IEE based on feedback from BEO and REA. Please attached the revised IEE. |
| 10/30/2015 12:07:29 | skhagi@usaid.gov | MEO | Cleared without comments | Thanks. |
| 12/4/2015 8:02:32 | pkim@usaid.gov | RLO | Cleared with comments | |
| 12/4/2015 8:29:55 | kray@usaid.gov | PPD | Cleared with comments | My clearance is contingent upon addressing OAA's comments. |
| 12/7/2015 6:27:22 | kfink@usaid.gov | OAA | Cleared with comments | The final budget is still in draft (awaiting response from USACE regarding the increased square footage). Otherwise, all other comments incorporated into the documents have been addressed. |
| 12/8/2015 8:03:49 | lreagan@usaid.gov | DR4 | Cleared with comments | One comment in 611(e) |