Asia 10-02 Pakistan IEE - ETD Infectious Disease Prevention and Health Care Programs - FATA

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Initial Environmental Examination

PROGRAM/ACTIVITY DATA:

Country: Pakistan

Objective: Investing in People - Health

Activities Name: Infectious Disease Prevention and Control Program (LOP $80million)
Primary Health Care and Water in FATA (LOP $100 million)
Pakistan Integrated Primary Health Care (LOP $400 million)

Funding Begins: FY 2009 **Funding Ends**: FY 2018 **LOP Amount:** $580 million

IEE Amendment Prepared by: Mary Cobb/Mahmood Hussain **Date:** September 30, 2009

IEE Amendment (Y/N): N

ENVIRONMENTAL ACTION RECOMMENDED: (Place X where applicable)

Categorical Exclusion	[X]	Deferral	[ ]
Positive Determination	[ ]	Negative Determination	[X]
With Conditions	[X]	Exemption	[ ]

SUMMARY OF FINDINGS:

1.0 BACKGROUND AND ACTIVITY/PROGRAM DESCRIPTION

1.1 Background

Pakistan faces huge health challenges. USAID works closely with Pakistan's Ministry of Health, its Ministry of Population Welfare, the Federally-Administered Tribal Areas (FATA) Secretariat, the private sector, and other donors to meet the challenges and improve the health status of Pakistanis. Overall goals are to help Pakistan (including the FATA) meet family planning needs; boost maternal and child health and improve survival rates; control major infectious diseases; and develop essential systems in the health sector. To reach these goals, USAID/Pakistan is in the process of designing new projects in four new umbrella activities: Integrated Primary Health Care; Infectious Disease Prevention and Control; Strengthening Health Systems; and Primary Health Care in the FATA. Under these four areas, several implementing partners will carry out the work. This IEE describes the work to be completed under the Infectious Disease Prevention and Control umbrella activity.

1.2 Description of Activities

1.2.1 Infectious Disease Prevention and Control Program, ~~LOP $80 million~~

Tuberculosis, HIV/AIDS, polio, malaria, hepatitis, and diarrheal disease are a substantial health problem in Pakistan. Prevention via immunization, safe behavior practices on the part of the public and on the part of health workers, and prophylactic drugs in some cases can help avert thousands of cases. Disease surveillance, outbreak investigations, and information-tracking can alert program managers to potential high-risk situations so that appropriate action can be taken. Finally, when people are infected, proper diagnosis and treatment of the disease is necessary, both to help the infected person but also because curing a disease like tuberculosis or malaria prevents further spread of the disease. To support Pakistan in prevention and control of these deadly infectious diseases, USAID will improve information and disease surveillance systems, procure infection-prevention supplies including auto-disable syringes, and offer professional training to epidemiologists and health workers to allow Pakistan to prevent, monitor, diagnose, and treat cases appropriately.

1.2.2 Primary Health Care and Water in FATA

This activity will work in both health care facility and community settings to contribute to the stabilization of FATA through the provision of quick-impact primary health care and water initiatives to communities impacted by security operations. It will also assist in the rehabilitation and reconstruction of damaged health infrastructure. Interventions may include: recruiting and training of health care workers and managers; rehabilitating, upgrading and equipping health facilities; water, sanitation and hygiene infrastructure and messages; interpersonal and mass communication of health messages; provision of medical supplies and drugs; review and revision of provider data collection tools; monitoring and evaluation; and other technical assistance in maternal, newborn, and child health, and water and sanitation.

1.2.3 Integrated Primary Health Care

This activity will work in both health care facility and community settings to improve access to and quality of maternal, newborn, and child health services, healthy timing and spacing of pregnancies, and reproductive health care. It will strengthen human resources, improve health care facilities, and extend the reach of primary care services. This program will operate in targeted districts around the country and may include: purchasing contraceptives and other health supplies; training of health care workers; upgrading and equipping health facilities (construction for the non-FATA primary health care programs is to be done under a separate project and is *not* part of this IEE); water, sanitation and hygiene; interpersonal and mass communication of health messages; capacity-building of health workers and program managers; introduction of quality improvement methodologies in health facilities; integration of maternal/child health and family planning at health facilities; policy dialogue and reform efforts; facility-level drug management; review and revision of provider data collection tools; monitoring and evaluation; and other technical assistance in maternal, newborn, child health and family planning, and water and sanitation.

2.0 EVALUATION OF PROJECT/PROGRAM ISSUES WITH RESPECT TO ENVIRONMENTAL IMPACT POTENTIAL AND RECOMMENDED THRESHOLD DECISIONS

2.1 Activities in training and capacity-building; technical assistance; policy and health systems reform; information, education and communication with the public; monitoring and evaluation; and social mobilization are not expected to have any adverse impact on the natural or physical environment. Therefore, these activities are recommended for **Categorical Exclusion** per 22 CFR 216.2(c)(2)(i), (ii) and (iii).

2.2 Small scale construction, renovation, and repair and maintenance activities, procurement and storage of medical supplies and pharmaceuticals and/or installation of equipment may have minor to moderate adverse impact on the natural and physical environment. For these activities, a **Negative Determination with Conditions** is recommended per 22 CFR 216.3(iii), the **Conditions** being environmentally-sound design; thorough monitoring and evaluation (M&E); and use of best management practices (BMPs) to minimize erosion and debris and waste production, and proper disposal of debris and waste. The **Conditions** include:

1. All activities will be implemented in accordance with best practice guidance provided in the Asia environmental guidelines on Environmentally Sound Design and Management of Small Healthcare Facilities at http://www.encapafrica.org/EGSSAA/ESDM%20for%20Small%20Health%20Facilities%2019Jan09b.pdf; Healthcare waste: Generation, handling, treatment and disposal at http://www.encapafrica.org/egssaa/medwaste.pdf; Health and Safety Guidelines as provided at: http://www.ifc.org/ifcext/sustainability.nsf/Content/EnvironmentalGuidelines and World Bank 1999 Pollution Prevention and Abatement Handbook as provided at http://www-wds.worldbank.org/external/default/main?pagePK=64193027&piPK=64187937&theSitePK=523679&menuPK=64187510&searchMenuPK=64187283&siteName=WDS&entityID=000094946_99040905052283
2. All building construction, rehabilitation and renovation activities will be conducted in accordance with Pakistani Environmental Health and Safety (EHS) and construction norms and standards (and in their absence in accordance with the best international practice appropriate to the seismicity levels in Pakistan and in the respective districts; these should be acceptable to USAID. Pakistan environmental protection regulations are available at www.environment.gov.pk.
3. The implementing partners shall minimize the use of, and properly dispose of hazardous materials and wastes for the small 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 activities for potential environmental impacts by preparing an Environmental Document Form (EDF) (**Attachment 1**). The implementing partners will 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 COTR/AOTR will ensure that the implementing partner(s) have sufficient environmental capabilities on their teams. All such reviews and conditions will be documented, reviewed by the COTR/AOTR and the Mission Environmental Officer (MEO) for the health program, and maintained in project files and documentation.
4. The implementing partners will adhere to the standard conditions for small-scale construction, water and sanitation, operations and maintenance, health clinics and medical facilities provided at **Attachment 3**.
5. The implementing partners will have adequate funds to implement any environmental mitigation and monitoring measures as well as it/they will have a qualified, MEO-

approved environmental impact professional(s) (EIP) who will assess and recommend environmental actions to be taken by the project and will coordinate implementation of mitigation measures, monitoring and reporting.

6. 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.
7. The contracts, grants and cooperative agreements with 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, grantees, subcontractors, and counterparts on the contract's environmental requirements and for ensuring their compliance with these requirements.
8. 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.
9. When equipment (computers, etc.) is procured, at the end of its life, it should be disposed in an environmental safe manner by a certified company in accordance with Pakistani 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).
10. The implementing partners will adhere to the following guidelines while implementing USAID-sponsored activities: UNHCR Handbook on Emergencies at http://www.sheltercentre.org/sites/default/files/UNHCR_handbook4Emergencies2007.pdf; A Brief Guide to Asbestos in Emergencies at http://www.sheltercentre.org/sites/default/files/Draft_A%20Brief%20Guide%20to%20Asbestos%20in%20Emergencies.pdf; Cleaning and disinfecting water storage tanks and tankers at http://www.sheltercentre.org/sites/default/files/WHO_CleaningAndDisinfectingWaterStorageTanks.pdf; Water, Sanitation and Health Guidelines at http://www.who.int/water_sanitation_health/emergencies/tsunamiguidelines/en/; Guidelines on Healthcare Waste Management at http://www.healthcarewaste.org/en/115_overview.html; Guidelines for Environmental Infection Control in Health-Care Facilities at http://www.cdc.gov/ncidod/dhqp/pdf/guidelines/Enviro_guide_03.pdf.

2.3 Summary Table

Activities	Effects on natural or physical environment	Recommended Threshold Determination
1.2.1 Infectious Disease Prevention and Control Program		
Training and Capacity Building for epidemiologists and health workers to appropriatly monitor, diagnose, and treat cases of prevalent infectious diseases	No adverse impact on the natural or physical environment.	**Categorical Exclusion** per 22 CFR 216.2(c)(2)(i) and (iii).

Technical assistance to improve information and disease surveillance systems.	No adverse impact on the natural or physical environment.	**Categorical Exclusion** per 22 CFR 216.2(c)(2)(i) and (iii).
Information, education and communication/social mobilization with the public about safer behaviors, risks of infectious diseases, immunization days, treatment options and other messages.	No adverse impact on the natural or physical environment.	**Negative Determination** per 22 CFR 216.3 (a)(2)(iii)
Outbreak investigations to determine the causes and routes of transmission in specific cases of outbreaks, in order to prevent future outbreaks and ensure proper treatment of all affected people.	No adverse impact on the natural or physical environment.	**Negative Determination** per 22 CFR 216.3 (a)(2)(iii)
Service delivery activities such as technical assistance to facilities, voluntary counseling and testing for HIV/AIDS, treatment of infectious, improvements in infectious disease diagnostic services.	Minor to moderate adverse effect on the natural and physical environment	**Negative Determination with Conditions** per 22 CFR 216.3(2)(iii)
Monitoring and evaluation including improvement in data collection systems at health facilities, periodic surveys, and other general monitoring activities.	No adverse impact on the natural or physical environment.	**Negative Determination** per 22 CFR 216.3 (a)(2)(iii)
Medical equipment and supplies including procurement and training on use of equipment for diagnosis, prevention, or treatment of infectious disease. Specific items may include auto-disable syringes, bleach or other materials for facility disinfection and infection prevention, HIV/AIDS testing kits and microscopes and other	Minor to moderate adverse effect on the natural and physical environment	**Negative Determination with Conditions** per 22 CFR 216.3(2)(iii)

diagnostic equipment. USAID does not intend to procure insecticide under this program.		
1.2.2 Primary Health Care and Water in FATA		
Training and capacity-building of facility-based health care workers, managers, and community health workers. Some training will be classroom-based and some will be practical or clinical. Capacity-building will also take the form of on-the-job training, supervision, and coaching.	No adverse impact on the natural or physical environment.	**Categorical Exclusion** per 22 CFR 216.2(c)(2)(i) and (iii).
Small-scale construction to rehabilitate, upgrade and equip health facilities in order to ensure that they are functional.	Minor to moderate adverse effect on the natural and physical environment	**Negative Determination with Conditions** per 22 CFR 216.3(2)(iii)
Water, sanitation and hygiene infrastructure will be installed or improved in health facilities and communities where this is lacking.	Minor to moderate adverse effect on the natural and physical environment	**Negative Determination with Conditions** per 22 CFR 216.3(2)(iii)
Information, Education and Communication including interpersonal and mass communication of health messages.	No adverse impact on the natural or physical environment.	**Negative Determination** per 22 CFR 216.3 (a)(2)(iii)
Monitoring and evaluation including improvements in data collection systems at health facilities, periodic surveys, and other general monitoring activities.	No adverse impact on the natural or physical environment.	**Negative Determination** per 22 CFR 216.3 (a)(2)(iii)
Other technical assistance in maternal, newborn, and child health, and water and sanitation, as needed.	No adverse impact on the natural or physical environment.	**Categorical Exclusion** per 22 CFR 216.2(c)(2)(i) and (iii).
Medical equipment and supplies including procurement, storage, and management of contraceptives, pharmaceuticals, and other medical equipment and	No adverse impact on the natural or physical environment.	**Negative Determination** per 22 CFR 216.3 (a)(2)(iii)

supplies. May include: condoms, contraceptive pills, injectable contraceptives, intrauterine devices, contraceptive implants, vitamin A, iron, other micronutrients, oral rehydration sachets, water purification tablets or other point-of-use products, scales and other child growth-monitoring equipment, and other basic essential drugs and immunizations. USAID does not intend to procure insecticide products.		
Training and capacity-building of facility-based health care workers, managers, and community health workers. Some training will be classroom-based and some will be practical or clinical. Capacity-building will also take the form of on-the-job training, supervision, and coaching.	No adverse impact on the natural or physical environment.	**Categorical Exclusion** per 22 CFR 216.2(c)(2)(i) and (iii).
1.2.3 Integrated Primary Health Care		
Training and capacity-building of facility-based health care workers, managers, and community health workers. Some training will be classroom-based and some will be practical or clinical. Capacity-building will also take the form of on-the-job training, supervision, and coaching.	No adverse impact on the natural or physical environment.	**Categorical Exclusion** per 22 CFR 216.2(c)(2)(i) and (iii).
Technical Assistance to introduce quality improvement methodologies in health facilities and to introduce new approaches, tools, and systems to make health services more	No adverse impact on the natural or physical environment.	**Categorical Exclusion** per 22 CFR 216.2(c)(2)(i) and (iii).

functional and effective. Advising and assisting in functional integration of maternal/child health and family planning services at health facilities, in review and revision of provider data collection tools.		
Technical Assistance for service delivery, infection prevention, and medical waste management.	No adverse impact on the natural or physical environment.	**Categorical Exclusion** per 22 CFR 216.2(c)(2)(i) and (iii).
Policy and Health Systems Reform including policy dialogue and advocacy with key leaders on maternal and child health and family planning/birth spacing policies, and implementation of key health systems improvements at the district level and below, in conjunction with the Health Systems Strengthening umbrella activity.	No adverse impact on the natural or physical environment.	**Negative Determination** per 22 CFR 216.3 (a)(2)(iii)
Information, Education and Communication including interpersonal and mass communication of health messages.	No adverse impact on the natural or physical environment.	**Negative Determination** per 22 CFR 216.3 (a)(2)(iii)
Social Mobilization to increase public demand for, and awareness of, health services and other key health behaviors.	No adverse impact on the natural or physical environment.	**Negative Determination** per 22 CFR 216.3 (a)(2)(iii)
Monitoring and evaluation including improvements in data collection systems at health facilities, periodic surveys, and other general monitoring activities.	No adverse impact on the natural or physical environment.	**Negative Determination** per 22 CFR 216.3 (a)(2)(iii)
Medical equipment and supplies including procurement, storage, and management of contraceptives, pharmaceuticals, and other medical equipment and supplies. May include:	Minor to moderate adverse effect on the natural and physical environment	**Negative Determination with Conditions** per 22 CFR 216.3(2)(iii) depending on the type of such equipment.

condoms, contraceptive pills, injectable contraceptives, intrauterine devices, contraceptive implants, vitamin A, iron, other micronutrients, oral rehydration sachets, water purification tablets or other point-of-use products, scales and other child growth-monitoring equipment, and other basic essential drugs and immunizations. USAID does not intend to procure insecticide products.		

2.4 Use of Pesticides: USAID/Pakistan Mission has an approved Pesticide Evaluation Report and Safe Use Action Plan (PERSUAP) for its activities involving use of pesticides in the economic growth, earthquake reconstruction and FATA development programs. If any of future activities under the education program involved assistance for the procurement and/or use of pesticides in the existing or expanded areas of activities, the PERSUAP will be amended by the USAID-accepted PERSUAP professional and approved by the BEO/Asia to include any additional broadly defined pesticides, which may be needed and allowed for procurement under the expanded program.

2.5 In accordance with 22 CFR 216.3(a)(9,) if a project is revised or new information becomes available, including during preparation of an EDF, which indicates that a proposed action might be "major" and its effects "significant," the Negative Determination with Conditions will be reviewed, and the COTR/AOTR, with an advice from the MEO/DMEO, will commence a scoping process as soon as practicable. The scoping and EA process, if determined necessary during scoping, will follow and comply with 22 CFR 216.3(a)(4).

APPROVAL OF ENVIRONMENTAL ACTION RECOMMENDED:
CLEARANCES:

Health Office Director	Janet Paz-Castillo	7/Oct/09 Date
Mission Environmental Officer	Mahmood Hussain	10-07-2009 Date
Director, Program Resource Management	Sharon Pauling	10/07/09 Date
Regional Legal Advisor	Rebekah Eubanks	10/9/09 Date

Regional Environmental Advisor/Asia	Andrei Barannik	10-06-2009 Date
Deputy Mission Director	Joseph Williams	10/14/09 Date
APPROVAL:		
Mission Director	Robert J. Wilson	10/14/09 Date
Bureau Environmental Officer/Asia	John Wilson	10/23/09 Date

Attachment 1

Environmental Documentation Form

INSERT PROJECT 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 **Proposed Sub-activities**	**Screening result** (Step 3 of instructions)			**Recommended Determinations** (Step 6 of instructions. Complete for all moderate and high-risk activities)		
	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.						
6.						
7.						
8.						
9.						
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.

(Signature) (Date)

BELOW THIS LINE FOR USAID USE ONLY

Approval

USAID Project Officer ☐ Approved ☐ Rejected	(print name)	(signature)
USAID MEO or DMEO ☐ Approved ☐ 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 COTR/AOTR.
- 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.

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." *Do not list any other activities in separate rows.*	If mitigation measures are well-specified in the IEE, quote directly from IEE 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. For example, visual inspections for seepage around pit latrine; sedimentation at stream crossings, etc.)	For example: "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.	

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, COTRs/AOTRs, 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 $100,000 per construction project. 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 (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.
- 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 and rainwater drain to a soakway or equivalent structure.
- Monitor drains and soakways 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.
- Test sludge for metals, pathogens and other appropriate constituents prior to use as fertilizer.
- 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.