

# US-AEP Philippines FY 2005 Work Plan

## I. Country Strategy

### Background

According to the Asian Development Bank, the Philippines economy faces three structural challenges to sustain growth: poverty reduction; adequate infrastructure; and proper environmental management. Yet, environmental degradation continues unabated throughout the Philippines.

Population growth, urbanization and industrialization continue to create massive pressures on the environment and the life support systems upon which all Filipinos depend. Public acknowledgement of widespread pollution problems and reform of policy, legal and institutional frameworks to protect the environment has yielded only limited success in curbing pollution and conserving resources.

The principal obstacles to progress are:

- The insufficiency of technical, human and financial resources at the national, regional and local government levels, often coupled with resistance to change.
- Ineffective environmental governance due to weak institutional capacity, particularly with regard to enforcement of laws and regulations.
- The worsening pollution and its economic and public health effects are measurable:
- Air pollution from vehicle and industrial sources – particularly the poorly maintained diesel vehicles and two-stroke motorcycles that dominate the streets – continues to be a major public health concern. It is exacerbated by increasing traffic, improperly managed inspection programs, and weak implementation and enforcement of the Clean Air Act. According to a World Bank report, excessive air pollution in four urban centers: Manila, Cebu, Davao and Baguio cost the Philippines more than \$430 million in health and productivity losses in 2002 alone. And, while leaded fuel has been eliminated since January 2001, total suspended particulates (TSPs) remain dangerously high.
- The World Bank estimates that roughly 35 percent of Filipinos have no access to clean drinking water, and 65% lack water for sanitation. Water-borne diseases accounted for about 31% of reported illnesses from 1996-2000. Losses in income due to water-borne diseases are estimated at \$46 million per year, in addition to medical expenses of \$20.8 million per year.
- The World Bank Environment Monitor reported that the Philippines generated at least 10 million tons of solid waste in 2000, nearly a quarter of which was generated by Metro Manila alone. Making matters worse, only 40 percent of wastes are collected – the rest is dumped in waterways and open spaces.
- Lack of capacity to manage hazardous waste is another critical public health and safety concern as nearly 2.5 million tons of hazardous waste are generated annually.
- Industries, particularly the small and medium sized enterprises (SMEs) that make up nearly 95% of industry in the Philippines, use resources inefficiently and are generally not in compliance with environmental laws.

To improve environmental governance, the national government continues to focus on improving enforcement, and in strengthening the capacity of local governments to meet their legal responsibility to protect the environment.

1. The Congress ***Improved public policy and environmental regulations*** requires all the stakeholders – national and local governments, civil society, and the private sector – to make difficult decisions. This, in turn, will require them to strengthen their capacity and resolve to implement existing laws, regulations and policies to protect the environment and use resources efficiently.

US-AEP will therefore work to assist Philippine leaders to strengthen environmental policies, laws and regulations through specific activities, including:

- Supporting effective implementation of the Clean Water Act (CWA) by continuing to assist DENR in the drafting of the CWA Implementing Rules and Regulations (IRRs) and facilitating the active participation of other stakeholders, the LGUs in particular, in the drafting of the IRR;
  - Assisting the National Water Resources Board (NWRB) in its ongoing reorganization efforts by building the capacity of a pilot Regional Hydrological Council and to ensure that the Council’s management plan is in harmony with the establishment of the Water Quality Management Areas (WQMA) under the CWA;
  - Strengthening the Department of Environment and Natural Resources (DENR) enforcement capabilities at both the national and regional levels; and
  - Strengthening the judiciary’s capacity to hear and decide environmental cases.
2. US-AEP efforts to achieve ***improved urban environmental management*** will focus effective integrated programs for improved air and water quality, particularly through initiatives directed to local government units (LGUs). US-AEP will provide assistance to improve the capacity of selected LGUs to promote and improve air and water quality within their jurisdictions by:
    - Working with the League of Cities of the Philippines (LCP) to replicate successful US-AEP-supported programs to reduce tricycle emissions; and
    - Improving water quality management through the introduction of low-cost wastewater treatment options.
    - ***Improved industrial environmental performance*** activities will promote energy, water and materials efficiency; and increase the adoption of efficient and sustainable environmental management processes. US-AEP will continue support for:
      - Development of a “Watergy” efficiency program in selected municipalities and local water districts to showcase low-cost and no-cost ways to reduce energy use.

has taken legislative actions to improve environmental management. Starting with the Clean Air Act (1999), the Ecological Solid Waste Management Act (2001) and, most recently, the landmark Clean Water Act (2004), which mandated the Department of Environment and Natural Resources to implement a comprehensive water quality management program to guarantee effective water utilization and conservation.

There is, however, still much to be done. The effective implementation of the CWA, for example, is far from assured, and the task of completing its Implementing Rules and Regulations (IRRs) promises to be complex and challenging. To be effective, the IRRs should reflect stakeholder – particularly

LGU – inputs and support and models that integrate, where appropriate, best practices from local, regional and global experience. Moreover, steps need to be taken to ensure harmony and consistency between the CWA and its IRRs, as well as with other related laws, rules and regulations for the water sector.

## **Philippines Country Strategy**

Since 1991, the US-AEP program in the Philippines has collaborated closely with the U.S. Agency for International Development (USAID) Mission and with Filipino partners towards the goal of the sustainable environment. US-AEP has facilitated long-term American-Asian partnerships among national and local governments, non-governmental organizations (NGOs), academia, and the private sector to develop and implement environmental policies; improve urban and industrial environmental management; and introduce technologies to solve specific environmental problems. For these same objectives, US-AEP also has worked to develop the capacity of Filipino institutions and key decision makers.

In the coming year, we will implement an integrated program to maximize Philippine and regional environmental sustainability. The US-AEP program will include initiatives to improve public policy and environmental regulations, urban environmental management, and industrial environmental performance.

This coming year, US-AEP will also coordinate more closely with related SO4 activities such as the Environmental Governance (EcoGov) and Clean Air Projects to ensure sustainability of many, if not all of US-AEP/Philippines' initiatives under the current US-AEP strategic framework.

## **Relationship to USAID and Other Donor Programs**

The US-AEP country strategy directly contributes to the attainment of USAID/ Philippines' SO4 – Productive, Life-Sustaining Natural Resources Protected, specifically the two of SO4's three intermediate results areas: Improved Environmental Governance, and Improved Urban Environmental Management. Also, the U.S.-Philippines Framework for Bilateral Cooperation in the Environment and Public Health provides a strategic framework for USAID/US-AEP environmental assistance. US-AEP will continue to work closely with the SO4 team leveraging resources to add value to USAID activities, particularly in the areas of improving air and water quality, resource efficiency, and environmental governance. All of US-AEP's activities support the broader U.S. Mission goal of "Revitalizing the U.S.-Philippines Partnership."

US-AEP will also seek to leverage resources of other donors, particularly the Asian Development Bank (ADB) and the World Bank (WB). For example, US-AEP will assist DENR in implementing recommendations from the ADB-funded assessment of the Pollution Adjudication Board and work with the World Bank Water Sanitation Program to develop a sourcebook on low cost wastewater treatment technologies.

## **Strategy Development Process**

A new US-AEP strategy, along with a new strategic objective, will be introduced in FY 2006. FY 2005, therefore, is a transition year focused on completing or sustaining US-AEP activities, and documenting the best practices and lessons learned.

The FY2005 Work Plan strategies and activities reflect discussions over the past three months with the USAID Mission; Philippine government leaders, particularly at DENR/EMB, Congress, and the Supreme Court; NGOs; academia; industry; World Bank, ADB, and other donors. US-AEP works to mesh the resources of its own member partners with the environmental goals and objectives of its Filipino partners. Resources and programs are also shared regionally with US-AEP countries in Asia.

F I N A L V E R S I O N

FY 2005, in particular, will culminate with a “Lessons Learned” conference that will highlight successful approaches which can be replicated by LGUs and the industry sector in the Philippines.

FINAL VERSION

<b>Activity</b>	<b>Activity Purpose</b>
1. Implementation of Clean Water Act	Improve DENR and local government capacity to effectively implement the Clean Water Act.
2. Pilot NWRB Regional Council and Secretariat	Support and provide capacity building assistance for NWRB's pilot Regional Council in Cebu
3. DENR Regional Enforcement	Improve environmental governance by enhancing DENR's regional capability to enforce environmental laws.
4. Greening the Judiciary	Strengthen the judiciary's capacity to hear and decide environmental disputes.
5. Chemical and Hazardous Waste Management	Improve environmental governance by strengthening DENR capacities to manage chemicals and hazardous wastes.
6. Clean Air Program for Tricycles	Reduce air pollution from tricycle emissions in 3 LGUs, develop phased-in standards for tricycle emissions, and institutionalize Clean Air Program for replication in other cities.
7. LINAW	Establish effective, low-cost wastewater treatment facilities in local governments.
8. Community-Based Mgt. of Water Resources	Strengthen CBEM and disseminate best practices in Philippine and Thai watersheds.
9. Watery	Develop sustainable measures to conserve water and energy.
10. US-AEP Lessons Learned Conference	Document and share best practices and success stories of US-AEP and its partners.

## II. Activities

### Activity 1: Implementation of the Clean Water Act

<b>Primary Program Area:</b>	Improved environmental governance (IR1) Strengthened environmental policies, laws and regulations (IR1.1a)
<b>In-Country Partners:</b>	Department of Environment and Natural Resources (DENR), Philippine Congress, local governments, non-governmental organizations (NGOs)
<b>International Partners:</b>	USEPA, Japan International Cooperation Agency (JICA), World Bank, United Nations Development Programme (UNDP), Korean aid agency
<b>Purpose:</b>	Improve DENR and local government capacity to implement the Clean Water Act (CWA).

**Description:** Over the last two years, US-AEP worked closely with the Philippine Congress and the DENR to facilitate the incorporation of international best practices into the CWA through technical exchanges, consultative workshops and observation programs to the U.S. US-AEP also provided technical assistance to help prepare for developing realistic and effective implementing rules and regulations (IRR) to make the provisions of the law a reality.

On February 4, 2004, the Philippine Congress finally ratified the CWA, marking a significant step towards addressing the continuing rapid degradation of the country's water quality. The World Bank estimates that roughly 35 percent of Filipinos have no access to clean drinking water and 65 percent lack water for sanitation. Water-borne diseases accounted for about 31 percent of reported illness from 1996-2000.

The CWA provides a new policy framework that will streamline processes and procedures in the prevention, control and abatement of pollution of the country's water resources. Efforts to draft the IRRs were initiated by DENR in 2004 with assistance from US-AEP and JICA. In FY 2005, US-AEP will continue to assist in the drafting of the IRRs by supporting LGU and public consultations on the draft IRRs and through technical assistance from USEPA, workshops and counterpart exchanges. The CWA provides that IRRs should be passed within one year from the law's passage.

The creation of Water Quality Management Areas (WQMA), which under the CWA will serve as the mechanism for decentralizing the management structure of water resources is the next challenge. The CWA mandates the Department of Environment and Natural Resources (DENR), in coordination with the National Water Resources Board (NWRB) to define and designate these WQMA. US-AEP will assist DENR to pilot test the delineation and establishment of a WQMA. Experts, including those from USEPA, will work with DENR, the concerned LGUs, and other stakeholders to formulate the delineation process and governance structure for the pilot WQMA. US-AEP will work with DENR for the adoption of the delineation process that will be used throughout the country.

**Implementation Activity 1: Drafting and Public Consultations on the IRR** – In collaboration with JICA, World Bank, UNDP and the Korean Aid Agency, US-AEP will support the completion of the IRR by implementing a series of activities that will ensure the implementability of the CWA. Activities will include (a) technical assistance from US EPA experts, (b) the conduct of LGU and multisectoral consultation workshops throughout the country; and (c) the development of reference materials outlining issues and questions on the CWA to enhance LGU and other stakeholder participation in the IRR consultation process.

**Implementation Activity 2: Pilot Test a WQMA** – US-AEP will assist DENR in consultation with LGUs, local NGOs and other stakeholders in pilot testing the delineation and establishment of a WQMA in a selected region. Activities will include (a) workshops and consultations with LGUs and local NGOs; (b) technical sessions with USEPA experts who will provide international examples and

experience from similar undertakings; and (c) work with DENR in issuing the appropriate instruments necessary to delineate and establish the pilot WQMA.

**Inputs:**

- a. **PADCO:** Provide technical assistance and coordination support to DENR and other stakeholders in drafting the CWA IRR; pilot activity with selected region to devise strategies for delineating, establishing and implementing requirements for Water Quality Management Areas
- b. **US EPA:** Two experts to assist with the development of the IRRs, and the WQMA pilot activity
- c. **TAF:** Grant to an NGO to organize public consultations on the draft IRRs.
- d. **TSSC STTA:** Develop reference materials outlining issues and questions on the CWA
- e. **IIE:** Support participation of stakeholders in workshops and public consultations for draft IRRs pilot WQMAs

**Expected Results:**

**Implementation Activity 1:**

- Issued IRRs for the CWA by the 3<sup>rd</sup> quarter of FY 2005.
- Broader stakeholder participation in the drafting of the CWA IRRs.

**Implementation Activity 2:**

Improved implementation of the Clean Water Act by piloting strategies for the delineation and establishment of a WQMA in a selected region by the end of FY 2005.

**Activity 2: Supporting the Creation of a Regional Water Council in Cebu**

<b>Primary Program Area:</b>	Improved environmental governance
<b>In-Country Partners:</b>	National Water Resources Board, Department of Environment and Natural Resources, Cebu Uniting for Sustainable Development, San Carlos University, Philippine Water Partnership
<b>International Partners:</b>	None
<b>Purpose:</b>	To provide technical assistance to ensure the success and sustainability of NWRB’s pilot Regional Council in Cebu and to ensure harmony and consistency with the creation of the WQMA under the Clean Water Act.

**Description:**

Over the last two years, US-AEP provided technical assistance to the government in its efforts to pass the Clean Water Act (CWA), which now provides a policy framework to streamline processes and procedures in the prevention, control and abatement of pollution of the country’s water resources. A key feature of the CWA is the creation of Water Quality Management Areas (WQMAs) which would serve as the mechanism for decentralizing the management structure of water resources.

To define and designate the WQMAs, the CWA mandates the Department of Environment and Natural Resources (DENR) to coordinate with the National Water Resources Board (NWRB), which is the government agency primarily responsible for regulating the use of the country’s water resources

Moreover, the NWRB recently completed its reorganization plan to decentralize the NWRB into 12 Regional Councils (RCs) that will manage the Philippines’ 12 hydrological regions. Similar to the WQMAs, these RCs will be multi-stakeholder in nature and will serve to manage the water resources within its respective jurisdictions. NWRB intends to set up a pilot RC in Region 7 by the end of 2004.

In view of these developments and the potential overlap in the jurisdiction and mandates of these Regional Councils and the WQMAs, it is critical to assist NWRB in its decentralization efforts to ensure consistency and harmony in establishing these two bodies. To complement activity #1, US-AEP will provide assistance to NWRB in building the capacity of a pilot Regional Council and Secretariat that will be established in Region 7 by the first quarter of 2005. Specifically, the activity will assist the Regional Hydrological Council enhance their capabilities and develop the appropriate governance structure to manage the water resources in Region 7 in a manner that is consistent with the related provisions of the CWA, particularly the WQMAs. This Activity also complements Activity #1 to the extent that the lessons learned from the set up of a pilot WQMA on the one hand, and a pilot Regional Council on the other, will enhance both the DENR’s and the NWRB’s capacity to implement an integrated management approach of the country’s water resources.

**Implementation Activity: Capacity-Building for the Pilot Regional Hydrological Council in Region 7** – In collaboration with NWRB, DENR, Cebu Uniting for Sustainable Development, San Carlos University, and the Philippine Water Partnership, US-AEP will provide technical and funding support to conduct capacity building activities for the pilot Regional Council for Region 7. Specific activities will include (a) trainings to enhance the capacity of the Council to carry out its duties and responsibilities; (b) workshops to identify issues and problems, and to solicit stakeholder input on the appropriate governance structure for the Council; and (c) technical assistance to facilitate the creation of an appropriate governance structure that is consistent with the related provisions of the CWA, particularly the WQMAs.

**Inputs:**

- a. **TSSC Grant:** Support public consultations, and capacity building activities for the creation of an appropriate governance structure for the pilot Regional Council and Secretariat in Region 7
- b. **TSSC STTA:** Conduct trainings, and provide technical assistance for the development of a governance structure for the Regional Council and its Secretariat
- c. **EPSG:** Support for in-country consultations

**Expected Results:**

- Established multi-stakeholder governance structure for pilot Regional Council in Cebu by June 2005.
- Increased capacity of the pilot Regional Council to manage the water resources in Region 7 in a manner that is consistent with the related provisions of the CWA, particularly the WQMA

### Activity 3: Strengthening Enforcement Capabilities of DENR Regional Offices

<b>Primary Program Area:</b>	Improved environmental governance (IR1) Increased number of local government units and public agencies implementing new or improved urban environmental management practices, policies and infrastructure projects. (IR1.2a)
<b>In-Country Partners:</b>	DENR (Environmental Management Bureau, Pollution Adjudication Board, regional offices)
<b>International Partners:</b>	US EPA, Asian Development Bank
<b>Purpose:</b>	Improve environmental governance and enforcement of environmental laws.

**Description:** Strengthening enforcement is at the heart of improving the Philippine environment given the deficiencies in compliance and awareness of Philippine environmental laws, as well as DENR’s very limited resources. On average, there are only 20 Environmental Management Bureau personnel for every 10,000 industries per region.

Capacity building of DENR’s enforcement and adjudication functions is also critical for improving implementation of environmental laws. An ADB-funded study done last year recommended that enforcement functions at the regional level be strengthened, and procedures and forms be clarified and standardized nationwide. It also recommended that the adjudication functions of the national Pollution Adjudication Board (PAB) be decentralized to the regional office level.

To begin implementing these recommendations, US-AEP provided support to DENR in FY 2004 to develop and pilot test improved compliance and enforcement procedures and forms in Regions 4A and 6. The results of these pilot tests will be presented at a national workshop in October 2004, and at the regional Asia Environmental Compliance and Enforcement Network forum in Bangkok on October 27-28, 2004. In FY 2005, US-AEP and US EPA will work with EMB and DENR to replicate and disseminate the results to other DENR regions, as well as work with an ADB-funded team to develop additional enforcement tools, such as more effective permits, standardized forms, and a field manual for inspectors.

Through technical assistance, workshops and consultations, US-AEP and US EPA will also work with EMB and the PAB Secretariat to pilot test a regional-level pollution adjudication board (PAB) in Region 6 to promote improved enforcement based on the ADB study recommendations approved by DENR. DENR and EMB will present the findings at the regional Asia Environmental Compliance and Enforcement Network forum that will be held in Manila in August 2005.

**Implementation Activity 1: Disseminate Improved Enforcement Tools, Practices and Procedures** – Building on the pilot projects in Regions 4A and 6, US-AEP and US EPA, in partnership with ADB, will assist DENR to improve enforcement at the regional level. Specific activities will include (a) presentation of pilot test results at a national workshop in October 2004 and at the regional Asia Environmental Compliance and Enforcement Network forum in October 2004; (b) work with DENR to adopt the pilot tested procedures and inspection checklist for replication nationwide; and (c) work with ADB consultants to develop additional guidelines and tools such as improved permits, standardized forms and procedures, and a field manual for inspectors.

**Implementation Activity 2: Pilot Regional-level Pollution Adjudication Board** – Following the recommendations of the ADB-funded study, US-AEP will support DENR efforts to promote improved enforcement by pilot testing the decentralization of its adjudication functions and encouraging the inclusion of alternative dispute resolution (ADR) mechanisms. Specific activities will include (a) conduct workshops to develop an action plan for establishing a regional PAB; (b) conduct training sessions to enhance the adjudication capacity (including the use of ADR mechanisms) of Region 6; (c) share results of pilot activity at the Lessons Learned Conference (see

Activity 10 below), and at the regional Asia Environmental Compliance and Enforcement Network forum in Manila in August 2005; and (d) work with DENR for the adoption of results for replication.

**Inputs:**

- a. **PADCO** – Technical assistance to DENR, EMB and the PAB Secretariat to develop an action plan for establishing a regional Pollution Adjudication Board (PAB) in Region 6, including ADR capabilities, based on past and on-going ADB studies; co-organize a national workshop to share lessons learned from the pilot and potential replication; link activity with on-going ADB-funded efforts to strengthen command-and-control capabilities (e.g., more effective permitting, standardize forms, develop field manual); present results at the Lessons Learned Conference and regional Asia Environmental Compliance and Enforcement Network forum in Manila
- b. **US EPA** – Provide guidance and share relevant experience in enforcement, and agency-level adjudication, including ADR.
- c. **EPSCG** – Support participation of DENR officials in workshops and consultations, within the Philippines and in the region. 2 DENR Central officials to travel to Region 6 twice, Enforcement Workshop for EMB regional staff, 26 pax from 13 regions to attend National Workshop in Iloilo

**Expected Results:**

**Implementation Activity 1:**

- Improved enforcement of environmental laws through the use of new sector-specific compliance monitoring checklists pilot tested in Region 6; and improved procedures such as more effective permits, standardize forms, and field manuals.
- Improved enforcement through better communication, coordination and reporting systems between regional, provincial and community-level offices of DENR pilot tested in Region 4.

**Implementation Activity 2:**

- Pilot PAB in Region 6 established for possible replication in other regions.

**Activity 4: Greening the Judiciary**

<b>Primary Program Area:</b>	Improved environmental governance
<b>In-Country Partners:</b>	Supreme Court of the Philippines, Philippine Judicial Academy (PHILJA), Tanggol Kalikasan
<b>International Partners:</b>	Supreme Court of Thailand; Supreme Court of India
<b>Purpose:</b>	To strengthen the judiciary’s capacity to hear and decide environmental disputes.

**Description:** Strengthening court capacity to hear environmental cases is one core strategy for strengthening environmental law enforcement. In FY 2004, US-AEP provided a grant to the Philippine Judicial Academy (PHILJA) to develop a training module to strengthen the capacity of judges to resolve environmental disputes. In FY 2005, US-AEP will work with PHILJA to enhance the module by developing interactive materials focusing on basic environmental science and environmental economic concepts. These materials, along with the training module, will be pilot tested by PHILJA to selected judges and prosecutors for institutionalization as a regular course offering.

On the institutional side, US-AEP will work with PHILJA and the Supreme Court to explore strategies for establishing a specialized bench or court to handle environmental cases. To ensure the sustainability of this activity, US-AEP will work closely with the EcoGov2 Project, which will also work to build the capacity of the judiciary in handling environmental cases.

**Implementation Activity 1: *Development of interactive training materials*–**

In partnership with PHILJA and Tanggol Kalikasan, US-AEP will (a) provide funding assistance to engage the services of an environmental expert to develop interactive training materials for incorporation in the training modules that Tanggol Kalikasan has produced in FY 2004; (b) pilot test the materials and modules with selected judges, and prosecutors; and (c) work with PHILJA to include this training in the regular course offering.

**Implementation Activity 2: *Designation or establishment of environmental courts* –**

US-AEP will provide assistance to PHILJA and the Supreme Court to discuss and lay the foundations for the eventual establishment of a specialized bench or court to handle environmental cases. Specific activities will include (a) facilitated dialogues between the Supreme Court, PHILJA and other stakeholders on issues and concerns related to the establishment of special environmental courts; and (b) introducing selected members of the Judiciary to international models of special environmental courts.

**Inputs:**

- a. **TSSC STTA:** Provide technical assistance to develop interactive materials
- b. **TAF Grant** – Pilot test interactive materials and training modules at the PHILJA
- c. **EPSG** – Support participation of 30 judges and prosecutors for 3-day pilot testing at PhilJA, and two judges to join study tour to Australia to visit environmental court
- d. **PADCO** – Continue work with the PHILJA and Supreme Court through targeted technical assistance and counterpart exchange with Thai and Indian judiciaries, including study tour to Australia to lay the foundations for the designation and/or establishment of environmental courts

**Expected Results:**

**Implementation Activity 1:**

Training on environmental law institutionalized under PHILJA’s Continuing Education Program

**Implementation Activity 2:**

Action plan with options for establishing green bench or court

**Activity 5: Chemical and Hazardous Waste Management**

<b>Primary Program Area:</b>	Improved Environmental Governance (IR1)
<b>In-Country Partners:</b>	Department of Environment and Natural Resources – Environmental Management Bureau (DENR-EMB), University of the Philippines (UP), Department of Interior and Local Government – Bureau of Fire Protection (DILG-BFP), Department of Health (DOH), Philippine Environmental Practitioners Association (PhilePA), Samahan ng mga Industriyang Kemika sa Pilipinas (SPIK), National Defense College of the Philippines (NDCP), Cement Manufacturers Association of the Philippines (CEMAP)
<b>International Partners:</b>	GTZ
<b>Purpose:</b>	Improve DENR capability to manage chemicals and hazardous wastes.

**Description:** In FY 2004, US-AEP provided assistance to the Department of Environment and Natural Resources (DENR) requested technical assistance from US-AEP to assist in building its capacity in chemical and hazardous wastes management. In particular, US-AEP collaborated with DENR, US-EPA other government agencies, industry and other stakeholders in implementing the following:

- US-AEP collaborated with the US EPA and the University of the Philippines (UP) for the institutionalization of the 4-module Hazardous Waste Management Certificate Course initially offered to build the capacity of the DENR-EMB, BFP, DOH, DND, PEZA and industry associations. At least 111 government personnel from these agencies were trained, and 29 of them were certified to serve as trainers for the institutionalization of this course in UP.
- US-AEP supported capability building activities for the DENR-EMB, BFP, DOH, industry associations and academic institutions in responding to chemical incidents by providing experts to assist in the development of the workplan, establishment of the framework for the incident command system, drafting of the procedural manual to operationalize the program; funding support for the trainings in the UP and Chemical Emergency First Responders workshop and study tour to the US’ Implementation on Chemical Emergency Response.
- US-AEP sent DENR staff to a US Study tour to improve understanding of the use of waste as alternative fuels for cement kilns, and sound permitting (including performance and operating standards) and inspection processes.

In FY 2005, US-AEP will continue to assist the DENR in the building its capacity to manage chemical and hazardous wastes by building on the aforementioned activities, specifically through the following:

- In collaboration with GTZ, the cement industry, and other stakeholders, US-AEP will assist DENR in preparing and issuing appropriate directives on the co-processing of wastes for manufacturing cement. In addition, US-AEP will build the capacity of selected regional staff in issuing permits and inspecting cement kilns.
- US-AEP will provide experts to assist in finalizing the procedural manual for the Chemical and Hazardous Waste Emergency Response Program, and pilot-test the program in the National Capital Region (NCR) to identify the gaps and improvements necessary before implementing the program on the national level. US-AEP will also support the training DENR, BFP, DOH and other concerned government agencies of government staff from the NCR on chemical emergency response through the UP’s course offerings for FY 2005 on Hazardous Waste Management.

***Implementation Activity 1: Inspection and Permitting for co-processing of wastes in manufacturing cement***– In partnership with GTZ, the cement industry and other stakeholders, US-AEP will help build DENR’s capacity to develop necessary directives, issue permits and monitor co-processing of waste for manufacturing of cement. Specific activities include (a) working with DENR on developing and issuing the necessary directives on co-processing waste for manufacturing cement; (b) conduct of dry-run/mock inspection of a cement kiln by US EPA; and (c) conducting training on permitting and inspecting cement kilns.

***Implementation Activity 2: Chemical and Hazardous Waste Emergency Response Program (CHWERP)*** – Under this component, US-AEP will (a) continue to provide technical experts to help the Department of Environment and Natural Resources (DENR) finalize the procedural manual for the Chemical and Hazardous Waste Emergency Response Program (CHWERP); (b) work with DENR and other stakeholders to pilot test the CHWERP in a selected region; and (c) support the participation of DENR, BFP, DOH and other concerned government agencies in the chemical emergency response module of the Hazardous Waste Management Certificate Course of the University of the Philippines.

**Inputs:**

**Implementation Activity 1**

- a. **TSSC STTA:** Provide technical assistance to develop necessary directives, permitting and inspection procedures for co-processing of wastes in manufacturing cement **\$6,000**
- b. **TSSC Grant:** Support conduct of training on permitting and inspection of cement kilns **\$3,000**
- c. **EPSP:** In-country training on co-processing of wastes for manufacturing cement, in-country stakeholder consultations, and cement-kiln study tours to Vietnam and Thailand **\$20,000**

**Implementation Activity 2**

- a. **TSSC Grant:** Provide assistance for the development and pilot testing of a replicable CHWERP in a selected region **\$10,000**
- b. **TSSC STTA:** Provide technical expert in developing a hazard map for the CHWERP pilot region and serve as a resource person at the UP HWM Course on chemical emergency response module **\$4,000**
- c. **EPSP:** Workshops and consultations in selected pilot region **\$6,000**; Support participation of regional government staff from NCR in UP HWM Certificate Course **\$8,000**

**Expected Results:**

**Implementation Activity 1:**

Increased volume of waste used in co-processing for the manufacture of cement as a result of DENR’s improved capacity to issue necessary directives, issuing permits and inspecting cement kilns.

**Implementation Activity 2:**

- Established a Chemical and Hazardous Waste Emergency Response Program pilot in a selected region.
- Strengthened inter-agency cooperation in responding to chemical emergencies through the adoption of the National Procedural Manual on Chemical and Hazardous Waste Emergency Response Program.

**Activity 6: Clean Air Program for Tricycles**

<b>Primary Program Area:</b>	Improved Environmental Governance (IR1)
<b>In-Country Partners:</b>	City Government of Puerto Princesa, City Government of San Fernando, League of Cities of the Philippines (LCP) and selected member cities, Environmental Legal Assistance Center, Motorcycle Development Program Participants Association (MDPPA), Tagbalay Foundation, Environmental Broadcasters Circle (EBC)
<b>International Partners:</b>	
<b>Purpose:</b>	Develop and implement CAP to reduce air pollution due to excessive emissions from tricycles; and institutionalize the CAP in LCP for replication in other member cities.

**Description:** In FY 2004, in collaboration with USAID Philippines Energy and Environment Program, US-AEP funded a study tour to Bangkok focused on reducing emissions from three wheelers. The objective of the study tour was to learn about Thailand’s successful air quality initiatives and experience in reducing fuel emissions, converting from two- to four-stroke engine vehicles, and incorporating cleaner fuels into its tuk-tuk (three wheeler) and taxi fleets.

As a result of the study tour, the City Government of Puerto Princesa, with assistance from US-AEP, issued an executive order establishing the Puerto Princesa’s Clean Air Program (PP CAP). In particular, US-AEP provided technical assistance to develop a strategic work plan for the implementation of the PP CAP –Tricycle Sector including, as components, (1) inspection and maintenance, (2) enforcement and legislation, (3) public awareness, (4) financing, and (5) infrastructure and transportation issues.

The success of the PP CAP has attracted the interest of other cities, such as San Fernando City in La Union. To facilitate replication in San Fernando City, US-AEP organized cross visits between officials of the two cities. US-AEP also conducted initial assessments of San Fernando City’s tricycle program to identify specific technical assistance needs.

In FY 2005, US-AEP will undertake the following activities:

- Continue assistance to Puerto Princesa City to sustain the PP CAP momentum, particularly through the implementation of the public awareness campaign and by facilitating the attendance of participants from the City in the annual Better Air Quality (BAQ) conference to be held in India in December 2004;
- Implement technical assistance to San Fernando particularly by providing support for the maintenance and inspection, and ordinance components of the CAP;
- Train LCP staff to replicate and implement CAP in another LGU, and develop information materials, media campaigns, modules and toolkits that can be used by LCP in replicating CAP in other member cities; Support the development of tri-media materials on the health effects of air pollution, which will be housed with the League of Cities for use in their efforts to replicate the CAP in other member cities.
- Establish sister association relationships between LCP and ICMA member associations to build the capacity of LCP to provide assistance to its member cities in implementing clean air programs; and
- Work with DENR to develop phased-in standards for tricycle emissions.

**Implementation Activity 1: Sustain the gains of, and implement CAP in at least 2 additional local government units (LGUs)** – USAEP will share the lessons of, and replicate the PP CAP in at least two additional LGUs. Specific activities include: (a) conduct of tricycle maintenance workshops and trainings in at least two additional LGUs; (b) gathering baseline data for hydrocarbons and carbon monoxide emissions in the target LGUs; (c) support the implementation of a public awareness

campaign on the health effects of air pollution in Puerto Princesa; (d) supporting the development of local ordinance for the implementation of the CAP; (e) facilitating exchanges between the target LGUs and Puerto Princesa City; (f) providing support for pre- and post- surveys in the implementation of public awareness campaigns in 2 LGUs; and (g) support the participation of pilot cities in the annual BAQ conference in India in December 2004.

***Implementation Activity 2: Build the capacity of LCP to implement the CAP in member cities***– In this component, US-AEP will work with LCP and ICMA to strengthen the capacity of LCP to implement and/or replicate the CAP in its member cities. Specifically, US-AEP will (a) actively involve designated LCP staff in the implementation of activities mentioned in implementation activity#1 in a selected LGU; (b) work with and facilitate the establishment of a sister association relationships between LCP and ICMA members who can mentor LCP in implementing air quality management programs; and (c) work with LCP and ICMA to develop toolkit/information materials on a CAP for Tricycles that will serve as a reference materials for LCP in assisting member-cities replicate the CAP. In addition, US-AEP will support the development of tri-media materials on the health effects of air pollution, will be which will be housed with the League of Cities for use in their efforts to replicate the CAP in other member cities.

***Implementation Activity 3: Develop phased-in standards for tricycle emissions*** - US-AEP will work with DENR to gather and analyze data generated from the CAP’s maintenance and inspection component as implemented in at least three (3) LGUs in order to develop phased-in standards for tricycle emissions. Building on the baseline data gathered from implementing the CAP in Puerto Princesa and San Fernando City, US-AEP will assist DENR in developing phased-in standards for tricycles by (a) conducting workshops to review and update the current standards for tricycles; (b) facilitating stakeholders’ consultations on the proposed phased-in standards; (c) assist DENR in issuing directives for the adoption of the standards.

**Inputs:**

**Implementation Activity 1**

- a. **TSSC Grants:** Support for development of toolkits, media campaigns, information modules and other related materials showcasing of Clean Air Program; Develop public awareness campaign for Puerto Princesa
- b. **EPSG:** Support tricycle maintenance workshops; baseline data for ambient air quality; send participants to BAQ 2004; public awareness campaign implementation; exchanges between 2 LGUs

**Implementation Activity 2**

- a. **TSSC STTA:** Technical assistance for the development of a model Clean Air ordinance for the tricycle sector
- b. **TAF Grant:** Continue assistance in the implementation of CAP in Puerto Princesa, Palawan; Grant to support publication of toolkits, information modules and other materials for LCP
- c. **ICMA:** Support for capacity building programs for the LCP Secretariat
- d. **QRG/TSSC:** QRG Grant to support the development of tri-media materials on the health effects of air pollution

**Implementation Activity 3**

- a. **TSSC STTA:** Technical assistance for the development of phased-in standards for tricycle emissions
- b. **TSSC Grant:** Support for public consultations and workshops
- c. **EPSG:** Support for consultation and consolidation of I/M emission results for 2 LGUs

**Expected Results:**

**Implementation Activity 1**

Reduced emissions from tricycles in 3 LGUs, as measured by reductions in hydrocarbon (HC) and carbon monoxide (CO) emissions.

**Implementation Activity 2**

- Developed toolkits/reference materials, and model framework and ordinance for clean air.
- Increased capacity of LCP to replicate the Clean Air Program in other member cities.

**Implementation Activity 3**

Developed and adopted phased-in standards for tricycle emissions

**Activity 7: Local Initiatives for Affordable Wastewater Treatment (LINAW)**

<b>Primary Program Area:</b>	Increased number of local government units and public agencies implementing new or improved urban environmental management practices, policies and infrastructure projects, including all sub-IRs. (IR1.2a)
<b>In-Country Partners:</b>	Muntinlupa City, Dumaguete City, Iloilo City, Naga City, League of Cities of the Philippines, Water Environment Association of the Philippines, industry, local NGOs
<b>International Partners:</b>	World Bank Water Sanitation Program, BORDA (Bremen Overseas Research and Development Association)
<b>Purpose:</b>	Assist LGUs to establish effective, low-cost wastewater treatment facilities to reduce water pollution and encourage replication and compliance with the Clean Water Act.

**Description:** Water pollution due to inadequate sanitation facilities is a serious problem in the Philippines—only 7% of the country’s total population is connected to sewer systems and only a few households have effective on-site treatment facilities. The newly-passed Clean Water Act gives local governments a leading role in providing domestic sanitation facilities, but no funding support. To address this need, US-AEP in FY 2004 through the Local Initiatives for Affordable Wastewater Treatment (LINAW) started assisting 4 cities, Iloilo, Naga, Muntinlupa and Dumaguete to develop and implement low-cost wastewater treatment systems to improve water quality management. Various activities such as technology conferences, cross-visits, training, action planning and stakeholders’ dialogues were implemented in FY 2004 to assist them to develop plans for short-term pilot projects (such as on-site treatment systems for slaughterhouses and public markets and off-site lagoons for market, household and commercial wastewater).

In FY05, US-AEP will assist the cities to implement the short-term projects. Specifically, for Dumaguete City, US-AEP will work with the Ting Matiao Foundation to provide a forum and resource speakers for workshops to promote the adoption of Environmental Management Plans (EMPs) by quick service (fast food) restaurants in Dumaguete City.

Building on the training and stakeholders’ dialogues conducted in FY 2004, US-AEP will also support the development of medium-term projects, such as domestic septage management systems in the 4 cities. US-AEP will also work with NGOs to develop programs for community-based wastewater management systems. In addition, US-AEP will help develop Information, Education and Communication (IEC) campaigns in each city to raise awareness of the extent of the problem, the need for action, and develop support for user fees.

To allow other LGUs to replicate the project, US-AEP will help develop and pilot test a training course for local engineers on designing low-cost wastewater treatment facilities in collaboration with the Water Environment Association of the Philippines (WEAP), a local chapter of the Water Environment Federation. Also, US-AEP will work with the World Bank Water Sanitation Program to develop a sourcebook on low-cost wastewater treatment technologies, and to replicate BORDA’s community-based wastewater treatment models in two non-LINAW cities.

The results of the LINAW Project will be shared to local governments at the Lessons Learned Conference (see Activity 10). US-AEP will also work closely with the USAID EcoGov2 Project for replication of successful approaches to other LGUs.

**Implementation Activity 1: Pilot Treatment Facilities in LINAW cities** – In partnership with the local governments of Naga, Iloilo, Dumaguete and Muntinlupa, US-AEP will continue to implement activities to establish short-term pilot treatment facilities such as on-site/off-site treatment systems for slaughterhouses and public markets and community-based sanitation systems. The following activities

will be implemented (a) conduct facility design training for short-term projects; (b) conduct project development training and workshop for medium-term projects; (c) identify financing options; (d) train local operators to properly maintain the facilities; and (e) coordinate with BORDA in replicating its community-based wastewater treatment model in two non-LINAW cities.

**Implementation Activity 2: Awareness Raising**– In partnerships with local NGOs, US-AEP will assist the cities in building public support for wastewater treatment through Information Education Communication (IEC) campaign. Specific activities include (a) providing grants to local NGOs in LINAW cities to develop IEC materials; (b) develop and pilot test training course for local engineers on designing low-cost wastewater treatment facilities with the Water Environment Association of the Philippines (WEAP), a local chapter of WEF; (c) work with the Water Sanitation Program of World Bank to improve their draft sanitation sourcebook for local governments; and (d) share lessons learned with other LGUs, national agencies, and other stakeholders to encourage replication at the US-AEP Lesson Learned Conference (see Actiivty#10).

**Inputs:**

- a. **PADCO** – Provide technical assistance to the cities and organize an IEC workshop and national workshop, provide support for engineering services and IEC material production and dissemination, develop and conduct an O&M training course and a course on designing low-cost treatment facilities
- b. **TAF Grant** – Continue implementation of grants to NGOs to develop community-based wastewater projects, support information and education campaigns in 4 LINAW cities, and increase capacity of LCP to replicate the campaigns in other member cities; Grant to work with the Ting Matiao Foundation to involve business in implementing EMPs for quick service restaurants in Dumaguete
- c. **EPSG** – Support participation of national and city representatives in workshops and site visits; support participation of 2 DENR central and region officials and 2 QSR Management Link officials for a workshop in Dumaguete

**Expected Results:**

**Implementation Activity 1:**

- Reduced pollution load (mainly BOD levels) of the effluent coming from the four pilot project facilities.
- At least two communities participating in sanitation and wastewater pilot projects.
- Approved septage management regulations at the city level (such as a city ordinance) in at least one city.

**Implementation Activity 2:**

- Increased awareness of the need for wastewater treatment by the targeted audiences as measured by informal before and after surveys and assessments by the NGO partners.
- At least 20 local engineers trained on design, operation and maintenance of low-cost wastewater treatment facilities.
- Published wastewater source book by World Bank improved with assistance from US-AEP.

**Activity 8: Community-Based Management of Water Resources**

<b>Primary Program Area:</b>	Improved Environmental Governance (IR1) Number of new or strengthened NGOs/associations/networks organized around urban environmental issues (IR1.2.1a)
<b>In-Country Partners:</b>	Laguna Lake Development Authority (LLDA), Federation of River Councils, several local NGOs and hog raiser associations
<b>International Partners:</b>	Council of State Governments (CSG), University of Maryland, Ministry of Natural Resources and Environment - Thailand
<b>Purpose:</b>	Strengthen community-based environmental management (CBEM) and disseminate best practices in Philippine and Thai watersheds.

**Description:** US-AEP, through CSG, provided a grant to the University of Maryland last year to support sharing of best practices in community-based environmental management (CBEM) between Laguna Lake in the Philippines, Thachin River in Thailand, and the Chesapeake Bay in the US. This has included a number of exchanges between the three sites to share experience and solutions and equip the partners with skills to address problems with solid waste management, wastewater pollution, and industrial pollution.

Grant activities will continue during the first half of FY 2005 when the project is expected to end. These will include a US study tour for political leaders in the Laguna Lake region to deepen their understanding of CBEM and their role in facilitating action by communities by learning from the Chesapeake Bay experience of successfully getting politicians to champion the cause of the Bay and push for action to solve the pollution problems.

Grant funds will also be used to support the development and implementation of a pilot project in the Laguna area to establish several communal biogas systems to manage swine waste from small scale (backyard) piggeries. These small operators (100 head or fewer) make up 70% of the hog farms in the Philippines. Half of these small holders have no wastewater treatment, and the other half have treatment systems of questionable effectiveness, and there is generally no enforcement of effluent standards. One creek in Laguna (in Majayjay) that receives waste from a large number of backyard hog raisers is exporting 4 tons of BOD per hectare per year and 1 ton per hectare of nitrogen (from fertilizer), much of which eventually flows into Laguna Lake (the rest drops out along the way to silt up the creek). The Philippine Department of Agriculture has developed and pilot tested a low-cost system to treat the swine waste and produce biogas that is used by the households for cooking fuel. It has only been done on an individual farm scale, so there is a need to pilot test it on a communal scale of three to four farms.

**Implementation Activity 1: Encourage political leadership in CBEM** – The University of Maryland, with assistance from US-AEP and EPSG staff, will organize a study tour for Laguna-area politicians to learn about the Chesapeake Bay’s successful experience in encouraging politicians to get involved in community-based efforts to rehabilitate the Chesapeake Bay.

**Implementation Activity 2: Pilot communal biogas system** – Provide support for the development and implementation of a pilot project that will establish communal biogas systems to manage swine waste from small scale (backyard) piggeries in Laguna. The pilot test will be managed by a local NGO with oversight from LLDA and funding from the CSG grant. Replication will be encouraged by LLDA through the river councils and local hog raisers associations.

**Inputs:**

- a. **PADCO** – Provide technical assistance and coordination support to the University of Maryland, LLDA and other project participants
- b. **CSG** – Project management and funding for the study tour; funding for the swine waste pilot project
- c. **EPSG** – Help organize the US study tour and provide ground transportation and insurance.

**Expected Results:**

**Implementation Activity 1:**

Drafted agreement on regional cooperation in CBEM based on linkages between political leaders from Laguna de Bay, Thachin River and the Chesapeake Bay

**Implementation Activity 2:**

Reduced pollution (BOD levels) at the Laguna Lake through adoption of improved biogas technologies and practices by small hog raisers in the watershed.

**Activity 9: Watergy Program**

<b>Primary Program Area:</b>	Improved Resource Efficiency and Management
<b>In-Country Partners:</b>	Metropolitan Cebu Water District, Cebu City Government, Metro Iloilo Water District, Iloilo City Government, Local Water Utilities Administration, Metropolitan Waterworks & Sewerage System, MWSS Regulatory Office, National Water Resources Board, Philippine Association of Water Districts, Energy Management Association of the Philippines and University of the Philippines.
<b>International Partners:</b>	ASE Private Sector Partners
<b>Purpose:</b>	Develop sustainable measures to conserve water and energy

**Description:**

ASE estimates that 60% - 70% of energy consumption of a municipal water system is used for pumping and distribution. The Watergy Program will assist select water districts in developing sustainable measures to reduce the energy requirements related to the delivery of water to their consumers.

Having conducted the energy audits at the Metro Iloilo Water District (MIWD) in April 2004 and at the Metropolitan Cebu Water District (MCWD) in June 2004, ASE will continue monitoring the implementation of programs recommended by its auditors to increase the water and energy efficiencies of the two water districts in FY 2005. In coordination with the water districts, ASE will monitor the reduction in electrical consumption and the improvements in the supply of water to their franchise area. Other water districts will also be identified for inclusion into the program.

ASE will also work with the University of the Philippines (UP) and the Energy Management Association of the Philippines (ENMAP) to develop additional energy audit courses that may be offered to the public as part of their continuing engineering education programs. Exchanges and technical seminars will also be provided to expand the technical skills and knowledge of key managers of partner institutions. ASE will continue working with institutions that are developing financing programs for the local water sector. Networks will be expanded in the private sector to introduce renowned equipment suppliers, technology and service providers to the participating water districts.

**Implementation Activity 1: Monitoring of Energy Audit Recommendations** - In coordination with MIWD and MCWD, US-AEP will continue to (a) build the capacity of these water districts by sending the General Managers to observe international best practices in Singapore; and (b) monitor the implementation of recommended actions to reduce water and energy usage of these water districts. Case studies on energy audit programs for these two water districts will be included in the Watergy toolkit being developed for the Philippines.

**Implementation Activity 2: Replication and Institutionalization of the Watergy Program** – To ensure replication and institutionalization of Watergy in the Philippines, US-AEP will (a) conduct an energy audit and develop an energy efficiency program in another Water District; (b) prepare a proposal to the Quick Response Grants to assist UP and ENMAP in developing and institutionalizing energy audit courses; (c) conduct workshops for the water districts in the provinces of Iloilo and Cebu to highlight the results of the water and energy efficiency programs for possible replication by other municipal water systems; (d) share results of Watergy at the US-AEP Lessons Learned Conference (see Activity#10).

**Inputs:**

- a. **ASE:** Monitor implementation of recommended actions to reduce energy use in MIWD and MCWD, support capacity building efforts for the local water sector and replicate the Watery Program in at least one water district
- b. **QRG/TSSC:** QRG to assist ENMAP and UP to institutionalize a course on energy audits for water utilities
- c. **IIE:** 14 pax for in-country workshops in Iloilo and Cebu

**Expected Results:**

**Implementation Activity 1:**

- Improved capacity of Metro Iloilo and Metropolitan Cebu Water Districts to achieve a 15% reduction in energy use.
- Increased awareness on industry best practices for the senior management of the water districts
- Toolkits developed from the energy audit programs of MIWD and MCWD for distribution to other water districts

**Implementation Activity 2:**

- Improved capacity of another water district to achieve a 15% reduction in energy consumption.
- Increased capacity of ENMAP and UP College of Engineering to provide training on energy audits for water utilities to support replication of the Watery Program in other local water districts.
- Energy audit course developed as part of the continuing engineering education program of UP and ENMAP.

**Activity 10: US-AEP “Lessons Learned” Conference**

<b>Primary Program Area:</b>	Increased number of LGUs and public agencies implementing new or improved urban environmental management practices, policies and infrastructure projects
<b>In-Country Partners:</b>	Department of Environment and Natural Resources, Department of Interior and Local Governments, local government units, non-government organizations, industry associations (QSR Management Link, Philippine Association of Paint Manufacturers, Croplife)
<b>International Partners:</b>	World Bank, GTZ, SIDA, UNDP
<b>Purpose:</b>	To document and share best practices and lessons learned from US-AEP activities.

**Description:** US-AEP will document best practices/successful approaches on urban environmental management that were supported by the program, such as but not limited to the DENR’s Philippine Environment Partnership Program (PEPP). As a culminating activity, and in partnership with the DENR, League of Cities of the Philippines (LCP), and NGO and industry networks, a two-day conference will be organized in August 2005 to share these practices and successful approaches for possible replication. Other donor-funded programs will also be invited to share successful approaches on urban environmental management.

The conference will focus on capturing lessons learned by medium (i.e., air, water, hazardous waste), and by sector/beneficiary (i.e., industry and government), which will finally be organized, consolidated and shared in a Final Report on the results of the event.

***Implementation Activity 1: Organization and conduct of “Lessons Learned” Conference***

US-AEP will provide funding and other assistance to support the organization of a 2-day conference to document and share best approaches and practices from its various activities. US-AEP will also provide funding assistance to support the participation of provincial delegates and speakers from the provinces.

The conference will be organized in a manner that allows it to best capture the lessons learned by medium (air, water, hazardous waste) and by sector/beneficiary (industry, government – both national and local). US-AEP will prepare and publish a final report documenting and sharing the results and lessons learned from the Conference, which will be shared to the participants of the conference and to other partners.

**Inputs:**

- a. **TSSC Grant:** To organize and conduct 2-day conference – **\$15,000**
- b. **TSSC STTA:** To assist in documentation and presentation, and preparation of Final Report of US-AEP success stories and lessons learned in improving urban environmental management in the Philippines – **\$5000**
- c. **EPSG:** To support participation of provincial delegates to the conference – **\$20,000**

**Expected Results:**

Increased awareness of, and capacity to sustain best practice models and success stories on urban environmental management policies and practices among national government agencies, LGUs, NGOs, industry associations, and other stakeholders.