

US-AEP Philippines

FY 2004 Work Plan

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 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, have yielded only limited progress to curb pollution and conserve 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 continues to be a major public health concern and is exacerbated by increasing traffic, improperly managed inspection programs, and weak implementation and enforcement of the 1999 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.
- 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. 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, of which Manila alone generated 23 percent. However, only 40 percent of wastes are collected; the rest is dumped in waterways and open spaces. Facing nearly 2.5 million tons of hazardous waste generated each year, Filipinos acknowledge hazardous waste management as a critical public health and safety issue.
- Industries, particularly the small and medium-sized enterprises that make up nearly 95 percent of industry in the Philippines, use resources inefficiently and are generally not in compliance with environmental laws.

To improve environmental management, the Government of the Philippines is taking legislative action. It has enacted the Clean Air Act (1999), the Ecological Solid Waste Management Act (2001) and has proposed a Clean Water Act. The national government also continues to focus on improving enforcement and the capacity of local governments to meet their legal responsibilities to protect the environment. Hundreds of communities have participated in various community-based environmental management

projects. They have developed the knowledge and skills necessary to identify their problems, to prioritize their needs, to harness their resources, and to take collective action.

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 a 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 develop an integrated program to maximize Philippines and regional environmental sustainability. The US-AEP program will include initiatives to improve environmental governance, reduce environmental impacts and improve resource efficiency and management.

Improved Environmental Governance

It requires all the players -- 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 work to assist Philippine leaders to:

- Strengthen institutions;
- Strengthen compliance and enforcement;
- Increase engagement of civil society in decision-making; and
- Increase corporate environmental responsibility.

Specific activities to achieve these improved capabilities include improving the odds for full implementation of the Clean Water Act (CWA), by

- Developing implementing rules and regulations,
- Strengthening the Department of Environment and Natural Resources (DENR) enforcement capabilities at both the national and regional levels; and
- Strengthening the Supreme Court's capacity to hear environmental cases.

Improved Environmental Conditions

This will require effective, integrated programs for improved air quality, water quality and management of solid and hazardous waste, particularly initiatives directed to LGUs. US-AEP will support:

- Improving capacity of LGUs to carry out their legal environmental responsibilities. Projects in targeted LGUs will include
- reducing tricycle emissions by identifying and replicating successful Asian and Philippines experiences;
- improving water quality management by introducing low-cost, low-tech wastewater treatment options;
- generating public support for municipal solid waste management through public awareness campaigns.
- Community-based environmental management, focused on disseminating best practices and promoting sustainability strategies and models. Activities will link Philippines, Thailand and the Chesapeake Bay to share experiences and identify and promote successful strategies.

Philippines government efforts to address hazardous waste issues by:

- certifying government regulators on hazardous waste management;
- institutionalizing a hazardous waste management certification course at the University of the Philippines;
- developing capacity of DENR to carry-out inventory of persistent organic pollutants (POPs); and
- building capacity for emergency response preparedness.

Improved Resource Efficiency and Management

Activities in this area will improve energy, water and materials efficiency; increase adoption of environmental management processes; and increase sanitation systems.

Support for cooperative engagement of government and industry to curb pollution from industries and ensure compliance with environmental laws through the Philippines Environment Partnership Program.

Development of a “Watergy” efficiency program in several municipalities and local water districts to showcase low-cost and no-cost ways to reduce energy use.

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 (see attachment A). Specifically, US-AEP activities will complement the SO4’s two intermediate results areas: improved environmental governance and improved air quality. 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 solid waste management, 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 help local government units develop sustainable funding mechanisms for solid waste management (SWM) and, thus, provide an additional component to the SWM programs supported by ADB and the World Bank. US-AEP will also assist DENR in implementing recommendations from the ADB-funded assessment of the Pollution Adjudication Board. Through a Council of State Governments grant to support the Laguna Lake Development Authority’s community-based environmental management efforts, US-AEP’s activities will increase the ability of the local governments and community organizations to access loans through the World Bank Laguna de Bay Institutional Strengthening and Community Participation (LISCOP) project.

Strategy Development Process

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

List of Projects

- 1a. **Clean Water Policies** — Improve DENR and local government capacity to implement Clean Water Act
- 1b. **DENR Enforcement Capabilities** — Improve environmental governance and enforcement
- 1c. **Environmental Enforcement through Courts** — Strengthen Court capacity to enforce environmental regulations
- 2a. **Air Pollution Awareness** — Increase awareness of health effects of air pollution and encourage action
- 2b. **Tricycle Air Pollution Reduction** — Reduce tricycle emissions in three (3) local governments
- 3a. **Community-based Environmental Management (CBEM)** — Increase number of communities adopting CBEM practices
- 3b. **Local Initiatives for Affordable Wastewater Treatment (LINA W)** — Assist LGUs to establish effective, low-cost wastewater treatment facilities
- 3c. **Fundraising strategies for organizational sustainability** — Strengthen community-based management to restore Mactan Channel
- 4a. **LGU Capability in Solid Waste Management (SWM)** — Build capacity of LGUs to develop and implement SWM solutions
- 4b. **Manage Hazardous Waste** — Increase capacity to manage hazardous wastes
- 4c. **Assess POPs Inventory** — Reduce public health threat through proper management of POPs
- 4d. **Chemical Emergency Response** — Build capacity to prevent and manage chemical emergencies
- 5a. **Watergy Efficiency** — Develop sustainable measures to conserve water and energy
- 5b. **Philippines Environment Partnership Program (PEPP)** — Promote industry compliance with environmental laws to curb pollution

Activities

1a. Support Implementation of Clean Water Policies

Purpose: Improve DENR and local government capacity to implement CWA

Primary Program Area: Improved Environmental Governance

IR 1: Improved Environmental Governance

Sub IR: Strengthened institutions to develop and implement environmental policies

In-country partners: DENR, Philippines Congress, local governments

International partners: PADCO, EPA, IIE, TAF, ICMA

Description: Building on the on-going assessment of the draft CWA with Congress, DENR and other stakeholders, US-AEP will continue to offer targeted technical support for developing implementing rules and regulations (IRR). Activities will focus on technical exchanges between U.S. and Asia experts with DENR staff to identify practical implementation solutions. EPA experts would be an important resource for these technical exchanges. Regional workshops—in Luzon, Visayas and Mindanao—will help civil society and local governments learn about the CWA and provide input for the IRRs. US-AEP will work with other donors, including UNDP, ADB and WB. Even if the CWA is not passed in FY04, these activities will advance the IRR development once the law is passed.

Expected Result:

- Effective IRR for the CWA adopted by DENR (within one year after enactment)

Implementation Activities:

- PADCO: arrange technical exchanges to share knowledge and experiences with DENR and other stakeholders.
- EPA: share expertise and experiences with DENR and evaluate the draft IRR.
- IIE: stakeholder consultations in Manila, Naga, Iloilo, Cebu; resource persons from U.S./Asia, as needed.
- TAF: grant to LCP for regional consultations with DENR, local governments and civil society groups.
- ICMA: organizational analysis to determine best means to improve LCP capability to provide environmental assistance to cities.

1b. Strengthen DENR Regional Enforcement Capabilities

Purpose: Improve environmental governance and enforcement of environmental laws

Primary Program Area: Improved Environmental Governance

IR 1: Improved Environmental Governance

Sub IR: Strengthened compliance with and enforcement of environmental regulations

In country partners: DENR (EMB, PAB, regional offices)

International partners: PADCO, EPA (Headquarters and Region III), IIE, TAF

Description: In addition to the pending CWA, DENR is engaged in other efforts to strengthen its enforcement capabilities. In particular, DENR is reviewing the recommendations of the WB SEECTA study and the ADB Pollution Adjudication Board (PAB) study. Currently, all enforcement cases involving a pollution fine (of which 77% are water pollution cases) must be reviewed and approved by the central

PAB. The average case requires 10 years and there is a bottleneck of about 580 unresolved cases. Assessments and consultations with DENR propose delegation of PAB functions to the regional offices as the most important near-term intervention. Both EMB and Regional Offices will need to strengthen their compliance monitoring and enforcement capabilities.

In order to support DENR implementation of the reform recommendations, US-AEP will work with EMB and Regional Offices to build the capacity to investigate complaints (enforcement) and hear disputes (adjudication). As a first step, US-AEP and EPA will work with EMB to strengthen its enforcement response policy, and case development policy. USAEP and DENR/PAB will also pilot new strategies in two regions (possibly Regions 4 and 6) to support decentralized enforcement and adjudication through regional pollution adjudication boards. Activities will include regional workshops, training and technical assistance for DENR staff (HQ and regional).

Expected Results:

- Improved enforcement and case management guidelines by FY05
- Action plan for decentralizing enforcement and adjudication functions to Regional Offices by FY05
- At least 200 DENR staff trained in improved enforcement and adjudication by FY05

Implementation Activities:

- PADCO: structure and arrange technical exchanges, stakeholder consultations, workshops and exchanges.
- EPA: provide technical assistance to regional PABs (in coordination with project 1a).
- IIE: travel of workshop participants (4 persons from DENR HQ to 3 regional workshops); 4 persons from each of 2 regional offices to workshop in Manila; 4 persons from each of 2 regional offices to exchange in U.S.
- TAF: help involve civil society in stakeholder consultations.

1c. Strengthen Court Capacity to Hear Environmental Cases

Purpose: Strengthen Court capacity to enforce environmental regulations

Primary Program Area: Improved Environmental Governance

IR: Improved Environmental Governance

Sub IR: Strengthened compliance with and enforcement of environmental regulations

In country partners: PHILJA, Tanggol Kalikasan, Philippines Supreme Court

International partners: TAF, PADCO, IIE

Description: According to the Philippines Judicial Academy (PHILJA), there is limited knowledge of environmental issues among judges and prosecutors. However, environmental issues are a high priority, supported by the Supreme Court Chief Justice. Building on previous successful partnerships, US-AEP will work with PHILJA and Tanggol Kalikasan to develop and pilot test training modules on the legal adjudication of environmental cases, and explore adoption of improved environmental law practices recommended by the 2003 Judges' Forum on Environmental Protection. Philippines judges will also participate in regional conferences to share and learn from their peers in neighboring countries. Activities will leverage USAID reform assistance to the Supreme Court and link with mediator training being conducted by TAF. The training module will be incorporated into PHILJA's continuing education curriculum.

Expected Results:

- Judges environmental law training course developed by June 2004
- Environmental training course completed by 35 judges by 2005
- Improved environmental policies and practices adopted by Philippines courts by 2006

Implementation Activities:

- TAF: grant to PHILJA to develop and pilot test modules for environmental law training course.
- PADCO: structure and facilitate the activities and organize regional exchanges.
- IIE: travel for U.S. and Asian legal experts to participate in pilot test course (3 U.S. lawyers or judges; three Asian experts); travel for PHILJA justices to participate in Thai regional conference.

2a. Support Public Awareness Campaign on the Health Effects of Air Pollution

Purpose: Increase awareness of health effects of air pollution and encourage action

Primary Program Area: Improved Environmental Conditions

IR 2: Improved urban environmental management, technologies, and resource efficiency

Sub IR 2.1: Management practices and technologies adopted to mitigate air pollution

In country partners: Environmental Broadcasters Circle, Partnership for Clean Air

International partners: TSSC

Description: US-AEP will help the Environmental Broadcasters Circle (EBC) and the Partnership for Clean Air (PCA) develop a media campaign to increase public knowledge of the adverse health effects of vehicular emissions and actions that can be taken. The campaign will publicize findings from the ADB health impacts study and the Integrated Environmental Strategies (IES) reports, both due to be released at the end of the year. The campaign will include existing TV and radio public service announcements and several new radio spots that will target tricycle drivers. The TV/radio campaign will include both public service and paid campaign spots and be sustained through continuing PCA and EBC public awareness programs. In order to measure the campaign's impact, EBC and PCA will submit 1-2 questions to an ongoing market research, before and after the two-month media campaign. In addition, US-AEP will support the participation of local government leaders in the 2003 Better Air Quality Conference. Topics will include management of mobile sources of air pollution and local action to improve air quality.

Expected results:

- Mass media public awareness campaign developed and TV/Radio spots aired in 2004
- Awareness of health effects of mobile sources of air pollution improved, as measured by survey questions in 2004 and 2005

Implementation Activities:

- TSSC: will manage this activity and provide a grant to EBC.
- IIE: participation of six LGU leaders in BAQ 2003; BAQ speaker.

2b. Reduce Air Pollution from Tricycles

Purpose: Reduce air pollution from tricycle emissions in 3 local governments

Primary Program Area: Improved Environmental Conditions

IR 2: Improved urban environmental management, technologies, and resource efficiency

Sub IR 2.1: Management practices and technologies adopted to mitigate air pollution

In country partners: at least three (3) local governments

International partners: IIE, TAF, TSSC

Description: In the last ten years, tricycles have surpassed cars as the second largest group of vehicles on the road after public utility vehicles. About 75 percent of tricycles in the Philippines are two-stroke engines with exhaust that contains high levels of unburned fuel causing particulate matter and hydrocarbon emissions. Pollution levels are further increased by the overuse of lubrication oil and the use of recycled lubrication oil. Other countries in Asia have shifted to four-stroke engines that are similar in cost to two-stroke engines and are less polluting and more fuel-efficient. To date, there has been little effort to develop comprehensive, integrated programs to reduce emissions or improve knowledge of the adverse health effects of tricycle emissions.

This activity will identify three local governments (with environmentally-progressive officials and significant tricycle populations) willing to participate in a clean tricycle program. Local government leaders, tricycle association representatives, NGO leaders, policy makers and DENR representatives will participate in an exchange to Bangkok to learn about Thailand's successful conversion from two-to-four stroke vehicles. Participants will share information at the Transport Organizations for Clean Air Convention in Manila. Local NGOs will be identified to work with the local governments to provide technical assistance, including a tool kit with information on how to develop a successful program, financing options, maintenance tips, health effects of air pollution, and education and communication materials.

Expected Results:

- Tricycle exchange to Bangkok completed and findings shared with tricycle sector in Manila
- Tool kit outlining successful elements of a clean tricycle program developed
- Clean tricycle programs, including conversion of 2-to-4 stroke engines and improved maintenance, adopted by six LGUs by 2006

Implementation Activities:

- TSSC grant: develop replicable pilot program to reduce tricycle emissions; assess policies; develop action plan and implementation strategy.
- TAF: grants to three NGOs to promote adoption of tool kit by LGUs.
- IIE: Bangkok exchange (12 persons/5 days).

3a. Strengthen Community-Based Environmental Management (CBEM) and Dissemination of Best Practices

Purpose: Strengthen CBEM and disseminate best practices in Philippines and Thai watersheds

Primary Program Area: Improved environmental conditions

IR 2.2: Improved urban environmental management, technologies, and resource efficiency

Sub IR: Management practices and technologies adopted to improve water quality

In country partners: LLDA, Federation of River Councils

International partners: CSG, PADCO, IIE, University of Maryland, Ministry of Natural Resources and Environment - Thailand

Description: For the last two years, US-AEP has facilitated linkages between the Laguna Lake Development Authority (LLDA), Federation of River Councils and their counterparts in the Chesapeake Bay region. A CSG grant will expand the scope to include the Thachin River Basin in Thailand. The three-way partnership builds on past and current efforts to enhance community-based environmental management (CBEM) in the Philippines and Thailand and highlights each partner's expertise. LLDA has

established effective CBEM policies that it can share with Thai and other US-AEP partners, such as the Mactan Channel Multi-Sectoral Management Council and partners in Iloilo, Naga and Cebu. The Thais will be able to share technology-based solutions for watershed management with their Philippines counterparts. The CSG program also complements the World Bank LISCOP project that also aims to strengthen LGU capabilities in CBEM.

Expected Results:

- Capacity of LLDA and the Federation of River Councils for CBEM improved and solutions for pollution prevention and watershed protection and restoration adopted
- CBEM model shared with other communities in the Philippines and Thailand by 2006

Implementation Activities:

- CSG: implementation grant.
- UMD: implementation.
- PADCO: coordinate activities among partners.
- IIE: travel for US-AEP partners to LLDA workshops (5 persons, 3 meetings).

3b. Local Initiatives for Affordable Wastewater Treatment (LINA W)

Purpose: Assist LGUs to establish effective, low-cost wastewater treatment facilities

Primary Program Area: Improved environmental conditions

IR 2: Improved urban environmental management, technologies, and resource efficiency

Sub IR 2.3: Management practices and technologies adopted to improve wastewater treatment

In country partners: (4) LGUs, LCP, WEAP, DOST, industry

International partners: PADCO, TAF

Description: Given technical, human and financial resource limitations at the national and regional levels, successful implementation of the CWA will depend on effective implementation by local governments. One of the biggest mandates of the draft law is developing domestic wastewater treatment facilities -- a task that local governments will find extremely difficult. Under the proposed project, US-AEP will pilot test a range of strategies to equip selected local governments with the technical, financial and policy tools that will help them face this challenge. US-AEP will provide selected LGUs with targeted technical assistance, technology and financing workshops, counterpart exchanges, capacity building and an exchange.

Building on the IWRA work with Naga and Iloilo and working with two other LGUs, this project aims to promote the adoption of low-cost sanitation technology and project financing solutions to improve water quality management. Working through an appropriate NGO in each community, US-AEP will also work with civil society to increase their participation and raise local awareness of domestic wastewater options and requirements to complement both short-term projects and medium to long-term strategies for water quality management.

Expected Results:

- Wastewater and sanitation action plan developed in 4 LGUs
- Low-cost technology solutions and financing options identified and pilot projects implemented in four LGUs (Iloilo, Naga, and 2 LGUs TBD) by 2005
- Increased involvement of civil society in local water quality initiatives

Implementation Activities:

- PADCO: provide selected LGUs with targeted technical assistance, technology and financing workshops, counterpart exchanges, and exchanges.

- TAF: grants to selected NGOs.
- IIE: U.S. exchange (8 people x one week); intra-Philippine exchange (8 people x one week); domestic travel for site visits and workshops (for 4 LGUs).

3c. Develop Fund-raising Strategies for Organizational Sustainability

Purpose: Improve sustainability of community-based management to restore Mactan Channel and its tributaries

Primary Program Area: Improved environmental conditions

IR 2: Improved urban environmental management, technologies, and resource efficiency

Sub IR 2.2: Management practices and technologies adopted to improve water quality

In country partners: Venture for Fund Raising, MCMMC

International partners: TAF

Description: Over the past year, US-AEP has provided technical assistance for organization development to the Mactan Channel Multi-Sectoral Management Council (MCMMC), a community-based coalition of businesses, civil society groups, academia, and government, that aims to preserve and restore the Mactan Channel and its river tributaries. In FY04, US-AEP will provide additional training in fund raising strategies (similar to that provided to the LLDA Federation of River Basin Councils) to the MCMMC to enhance its sustainability.

US-AEP will partner with Venture for Fund Raising to conduct an organizational assessment of MCMMC to identify appropriate fund-raising strategies, with particular focus on program or earned income activities. Other activities will include: setting up a fund raising unit; coaching in fund raising skills; and assessment and evaluation of MCMMC's financial sustainability development program. The MCMMC will also benefit through participating with the LLDA, Chesapeake Bay and Thachin River watersheds in the CSG-sponsored CBEM Best Practices program.

Expected Results:

Fund raising unit at MCMMC established and strategies for financial sustainability developed by end of 2004

Capacity to successfully implement environmental management strategies increased by end of 2004

Implementation Activities:

TAF: will provide a grant to Venture for Fund Raising for MCMMC.

4a. Build LGU Capacity to Implement the Solid Waste Management Law

Purpose: Build capacity of LGUs to develop and implement SWM solutions

Primary Program Area: Improved environmental conditions

IR 2: Improved urban environmental management, technologies, and resource efficiency

Sub IR 2.4: Management practices and technologies adopted to improve solid waste management

In country partners: SWAPP, UAP-MCC, targeted LGUs

International partners: TSSC, IIE

Description: Although progress has been made in collecting, segregating and recycling solid waste, disposal remains a problem. Local government units (LGUs) must convert existing open dumpsites to

sanitary landfills by 2006. LGUs lack technical skills and financing, and face community resistance. US-AEP will collaborate with USAID and ADB to identify LGUs that are ready to implement SWM plans. US-AEP will help these LGUs identify technological solutions and establish sustainable funding mechanisms, such as garbage collection fees. USAEP will also work with SWAPP to help these communities develop effective campaigns to “sell” both the SWM technology and the funding mechanism. US-AEP will also work with LGUs to pilot test the principles of the Design Manual on Solid Waste Management Facilities (FY03 activity). Technical assistance will be provided for public consultation and design planning sessions.

Expected Results:

- Appropriate SWM technology solutions and sustainable funding mechanism identified and established by at least 2 local governments
- Campaign to build community support for SWM projects launched by SWAPP
- Design scheme developed for materials recovery facility in two LGUS

Implementation Activities:

- TSSC STTA: U.S. expert to help LGUs identify funding mechanism
- TSSC Grant: SWAPP IEC campaigns; UAP-MCC pilot tests
- IIE: domestic travel for MAPES follow-up; for MRF design; for SWAPPCON

4b. Develop Capacity to Manage Hazardous Wastes

Purpose: Increase capacity to manage hazardous wastes

Primary Program Area: Improved environmental conditions

IR 2: Improved urban environmental management, technologies, and resource efficiency

Sub IR 2.5: Management practices and technologies adopted to improve hazardous waste management

In country partners: University of the Philippines, Philippines Business for the Environment

International partners: EPA, TSSC

Description: US-AEP and EPA began work in 2003 with the University of the Philippines to develop a certificate course for Philippines government personnel, particularly the Department of Environment and Natural Resources (DENR) and the Department of National Defense (DND) on the key elements of hazardous waste management. In FY04, EPA and UP experts will offer the four-module course (one module every 2-3 months). In addition to providing classroom instruction, EPA experts will also train future trainers. The course will then be institutionalized within UP’s Engineering Department and offered in subsequent years to the general public. To maximize the impact of the Course Program, EPA will work with the Philippines Business for the Environment to offer four one-day “best-practices” workshops that will help build the capacity of industry to manage hazardous wastes in the workplace.

Expected Results:

- At least 30 government personnel certified in hazardous waste management by 2004
- Hazardous Waste Management Certificate Course institutionalized at the University of the Philippines by 2005

Implementation Activities:

- EPA: fund EPA trainers
- TSSC: liaise with EPA, UP and PBE to guide the process and manage the logistics
- University of the Philippines: provide venue and staff to run 4-module hazardous waste management course
- Philippines Business for the Environment: organize industry workshops

4c. Provide Technical Assistance to Assess POPs Inventory

Purpose: Reduce public health threat through proper management of POPs

Primary Program Area: Improved environmental conditions

IR 2: Improved urban environmental management, technologies, and resource efficiency

Sub IR 2.5: Management practices and technologies adopted to improve hazardous waste management

In country partners: DENR

International partners: TSSC, EPA

Description: The Philippines continues to be a leader among the developing countries in Asia in addressing Persistent Organic Pollutants (POPs), as part of the government's efforts to fulfill its responsibilities under the Stockholm Convention. Over the past two years, US-AEP has supported several training workshops to facilitate a complete and accurate inventory of obsolete pesticides, PCBs and dioxins. The POPs inventory is currently underway. In FY04, US-AEP and USEPA will provide follow-up technical support to DENR to review the results of the inventory and determine the next steps in the development of a National Implementation Plan for managing POPs.

Expected Results:

- Technical evaluation of POPs inventory completed and management options outlined

Implementation Activities:

- TSSC: work proactively with DENR and EPA to coordinate review of inventory and exploration of next steps
- EPA: provide technical assistance to DENR to review results of POPs inventory and recommend next steps.

4d. Facilitate Development of Chemical Emergency Response Program

Purpose: Build capacity to prevent and manage chemical emergencies

Primary Program Area: Improved environmental conditions

IR 2: Improved urban environmental management, technologies, and resource efficiency

Sub IR 2.5: Management practices and technologies adopted to improve hazardous waste management

In country partners: DENR, Responsible Care, Inter-Agency Committee on Environmental Health

International partners: EPA, TSSC, IIE

Description: DENR has requested US-AEP technical assistance to build capacity to respond to chemical emergencies. DENR has a number of responsibilities pertaining to the importation, manufacture, processing, handling, storage, transportation, sale, distribution, use, and disposal of unregulated chemical substances, as well as the storage and disposal of hazardous and nuclear waste. Other government agencies including the Department of Health and Department of Labor and Employment (DOLE), as well as LGUs, have important roles in responding to chemical accidents and emergencies.

The USAEP-USEPA-funded hazardous waste management certificate course includes an Emergency Response module that will be offered in December at the University of the Philippines. EPA experts will also help DENR staff assess additional training needs and develop a plan to address these needs through exchanges, workshops and training. US-AEP will provide technical experts to help DENR draft

policies, procedures and guidelines to deal with chemical accidents and emergencies. The Responsible Care Program of the Chemical Industry Association of the Philippines (SPIK) (developed with US-AEP support) has emergency response protocols and will help develop this program. US-AEP will also facilitate linkages with other regional programs (such as Thailand's) to help the GRP build its capacity to deal with chemical accidents and emergencies.

Expected Results:

- 30 people trained in the UP Emergency Response course
- Assessment of DENR emergency response training needs completed
- Emergency response protocols (policies, procedures and guidelines) developed

Implementation Activities:

- TSSC: Facilitate the assessment and capacity building process, coordinating with DENR, EPA, Responsible Care and other agencies
- TSSC STTA: Experts to provide training and help develop policies, procedures and guidelines.
- EPA: THW experts to help assess DENR needs and suggest next steps.
- IIE: exchange to U.S. and Thailand to learn about U.S. and Thai government and industry experience.

5a. Introduce water and energy efficiency (Watergy) program

Purpose: Develop sustainable measures to conserve water and energy

Primary Program Area: Improved resource efficiency and management

IR 2: Improved urban environmental management, technologies, and resource efficiency

Sub IR 2.6: Management practices and technologies adopted to improve resource efficiency.

In country partners: Cebu; Iloilo, National Water Resources Board, Local Water Utilities Administration, Department of Interior and Local Government, National Electrification Administration, Philippines Water Partnership, Philippines Association of Water Districts.

International partners: ASE, IIE

Description: ASE estimates that 60-70 percent of a typical municipality's energy budget goes to water pumping expenses, which can be easily reduced with good management practices, such as pumping during off-peak hours. ASE will develop a Watergy program (water and energy efficiency) to identify low-cost and no-cost ways to reduce energy related to water pumping and distribution. ASE will conduct energy audits and identify efficiency opportunities in at least two municipalities. Working with senior municipal officials and water utility managers, ASE will introduce pilot Watergy programs. Exchanges and technical seminars will expand technical capabilities of key managers. Companies, lending institutions, government institutions, trade associations and other stakeholders will be engaged to facilitate and contribute to Watergy activities. Ultimately, networks will expand to include private manufactures of high-efficiency water and energy equipment and services focused on water management, distribution and treatment.

Expected Results:

- Energy and water audits in partner municipalities conducted
- Pilot energy efficiency programs in two municipalities developed
- Cost-saving energy and water efficiency measures implemented
- Measures that save 20 percent annually in water/energy costs developed by 2006

Implementation Activities:

- ASE: program management.
- IIE: travel to workshops in targeted municipalities; travel to Watergy workshop in India.
- ICMA: sponsor two people to India workshop

5b. Facilitate Implementation of the Philippines Environment Partnership Program (PEPP)

Purpose: Promote industry compliance with environmental laws

Primary Program Area: Improved resource efficiency and management

IR 3: Improved industrial environmental management, technologies and resource efficiency

Sub IR: Increased adoption of environmental management processes

In country partners: DENR/EMB, DTI/BOI, MAP, PCPCI, PPCA, and TLRC

International partners: TSSC, TAF

Description: DENR launched the Philippines Environment Partnership Program (PEPP) in June 2003 in order to promote compliance with environmental laws and curb industrial pollution. The PEPP aims to foster a pro-active partnership with industry by promoting self-regulation and accountability, and introducing fiscal and technical support incentives.

US-AEP will assist DENR/EMB and the Department of Trade and Industry Board of Investments (DTI/BOI) with three important objectives: 1) preparing PEPP implementation guidelines; 2) providing information on PEPP to industry; and 3) providing technical assistance to develop Environmental Management Plans (EMPs). US-AEP plans to work through industry associations that we have previously supported, such as the Management Association of the Philippines (MAP), the Philippines Chamber of Commerce and Industry (PCCI), the Pollution Control Association of the Philippines (PCAPI), and the Technology Livelihood Resource Center (TLRC).

DENR/EMB has requested US-AEP assistance with EMPs for the hotel industry. As part of this activity, we will incorporate elements of the Scotia program -- Sustainable Coastal Tourism in Asia -- to work with private sector partners, such as hotels, resorts and dive shops to limit the environmental impact of tourism, particularly in marine protected areas.

Expected Results:

- PEPP implementation guidelines developed
- At least 3 industry associations committed to participate in PEPP
- EMPs for at least 3 industry associations developed

Implementation Activities:

- TSSC: direct activity with DENR and MAP/PCAPI, and coordinate SCOTIA activities
- TSSC Grants: to MAP to sponsor stakeholder meetings (in Manila, Cebu and Davao); and to PCAPI to engage targeted industry sectors.
- TSSC STTA: provide one U.S. expert to assist with implementation guidelines and one U.S. expert to assist with EMPs.
- IIE: travel for two U.S. experts to assist with guidelines and two U.S. experts to assist with EMPs; travel for 2 persons to Chemical Association meeting in Thailand.
- TAF: coordinate civil society and local government participation in stakeholder meetings