

Philippine Sanitation Alliance

4th Quarterly Report

July to September 2008

Prepared by AECOM International Development for USAID/Philippines under Cooperative Agreement No. 492-A-00-07-00023-00

I. Executive Summary

During the quarter, the United States Agency for International Development (USAID) Philippine Sanitation Alliance (PSA) project conducted promotions workshops in Zamboanga and Cebu cities to train them in developing effective promotion campaign to support their septage management programs. PSA, in partnership with the Philippine Hospital Association, also facilitated a technology-finance workshop for hospitals across the country. In September, the PSA worked with the Philippine Department of Health to train more than 130 sanitary engineers from across the country on appropriate wastewater treatment and other issues. The engineers discussed their new roles in addressing sanitation problems and developed solutions to the problems they face. In both workshops, the participants visited treatment facilities within Metro Manila to strengthen their learning experience.

In July, US Ambassador to the Philippines Kristie Kenney visited the public market wastewater treatment plant in Dumaguete City. The treatment facility was developed with assistance from the USAID Local Initiatives for Affordable Wastewater Treatment (LINAW) project, with continued assistance from the PSA. At the end of July, the mayor of Sta. Rosa led a groundbreaking ceremony for the Santa Rosa Community Hospital wastewater treatment plant. Construction is now underway.

The other partner cities of PSA worked on developing their sanitation projects. Cagayan de Oro City plans to develop an interceptor and a wastewater treatment facility along the CDO River. The mayor also intends to use the housing fund of the city to build treatment facilities for small relocation projects.

Other PSA activities included participating in several national and regional sanitation conferences as resource speakers on sanitation.

II. Performance Objectives and Expected Outputs

Achievement of performance indicators and results are on track, as well as the level of expenditures. Non-USAID funds leveraged during the quarter totaled \$257,089, and 16,736 people obtained access to improved sanitation as a result of PSA assistance. This exceeded the targets of \$150,000 and 10,000 people for the year.

Indicator Reporting

Summary of Results

Indicator	4th Qtr	Cumulative	FY08 Target
1. Number of people in target areas with access to improved sanitation facilities as a result of USG assistance (disaggregated by gender)	Men 5,499 Women 11,237 Total 16,736	Men 5,641 Women 11,525 Total 17,166	10,000
2. Number of feasibility and special studies/plans prepared	1	4	4
3. Amount of non-USAID financing mobilized for sanitation projects and facilities	\$257,089	\$407,365	\$150,000
4. Number of people trained in environmental law, enforcement, public participation, and cleaner production policies, strategies, skills and techniques, disaggregated by gender	344 men 147 women 491 total	737 men 300 women 1037 total	200
5. Number of sanitation and hygiene promotion events conducted (WASH campaign)	0	1	1
6. Number of pollution and urban environment policies, laws, agreements or regulations implemented	1	2	2

Details of Results

1. Calbayog City, one of the LINAW 2 cities that is now involved in the PSA project, has awarded a construction contract to build a wastewater treatment facility for its public slaughterhouse. City government staff also worked with several commercial establishments to assist them in building a treatment facility. Zamboanga City developed detailed plans to construct a treatment facility for its public market and slaughterhouse, and secured P7.5 million in financing for these projects. The number of people that will benefit from these projects is shown below (figures for the Zamboanga slaughterhouse will be reported next quarter, as well as the exact amount of the project costs).

Project	Men	Women	Total
Calbayog slaughterhouse	28	10	38
Calbayog commercial establishments	70	148	218
<u>Zamboanga Public Market</u>	<u>5401</u>	<u>11079</u>	<u>16480</u>
Total	5499	11,237	16,736

2. Cagayan de Oro City Action Plan prepared.

3.

Private Sector	\$64,539.80	Cash	\$245,837.67
	\$192,549.41		\$11,251.54
<u>Public Sector</u>		In Kind	
<u>Total</u>	\$257,089	<u>Total</u>	\$257,089

(See attached summary and cost share sheets from each partner for details)

4.

People Trained	Men	Women	Total
Zamboanga Promotion Workshop July 7-8	52	27	79
Davao Septage Management Workshop August 14	83	45	128
Hospital Tech/Fin Workshop August 12	70	35	105
Cebu Promotion Campaign Workshop Sept. 15-16	35	12	47
DOH Training for Sanitary Engineers Sept. 23-25	<u>104</u>	<u>28</u>	<u>132</u>
Total for Quarter 4	344	147	491

5. No WASH days were conducted this quarter.

6. Throughout the year, the Clean Water Act was implemented by the PSA cities. In Quarter 4, Muntinlupa City reported that they have made a renewed effort to implement their water pollution ordinance, and are considering revising it next year to reflect provisions in the Clean Water Act.

III. Summary of Major Accomplishments

A. US Ambassador Visits Dumaguete Public Market Wastewater Treatment Plant



On July 1, US Ambassador to the Philippines Kristie Kenney met with Dumaguete City Mayor Agustin Perdices at the public market wastewater treatment plant, which was developed with assistance from the USAID Local Initiatives for Affordable Wastewater Treatment (LINA), with

continued assistance from the PSA project. The Ambassador was briefed on the treatment process and the effluent re-use program, where the treated water is used to water the plants at the park and provides savings to the city. She was also shown the water quality of the influent and the effluent to demonstrate the efficiency of the facility. She also noticed the turtles in the indicator pond, which indicates the life-supporting quality of the final effluent. The Ambassador walked through the wet market and to the dry goods section, where she was given leis and flowers by the flower vendors and where she bought a basket of flowers. During a press conference at Siliman Church, she said the facility is a model for other local government units to follow in cleaning up their wastewater from markets.

B. Zamboanga Holds Promotion Campaign Workshop

Zamboanga City held a training workshop on public awareness promotion campaigns for sanitation and wastewater management on July 7-8, 2008 at the Orchid Garden Hotel, attended by 40 participants from the LGU, academe, national government agencies, government corporations, service providers, NGOs and media. The training content and design were guided by the Promotions Toolkit that the USAID Environmental Cooperation-Asia (ECO-Asia) program is developing. The promotions effort will focus on encouraging households and commercial establishments to cooperate with the planned septage management program and pay user fees. Households were initially disaggregated into four sub-segments based on their current practices and ownership of sanitation facilities (e.g., toilets and septic tanks). The next step is to conduct research to profile the target audiences and establish their position in the behavior change spectrum. A promotions plan will be developed once this research is completed. The research will be conducted by the academe members of the group. Meanwhile, representatives from the media will start talking about the sanitation issue on the radio. The campaign will support the Technical Working Group's development of a septage management program, which includes treatment facilities, collection scheme, user fees and a city ordinance.

C. Philippine Local Governments Agree to Take Lead in Tackling Sanitation Challenges

During the 2nd National Sanitation Summit, representatives from Philippine local government units (LGUs) agreed that they should take the lead role in developing solutions to the sanitation challenges facing their areas. The summit focused on the institutional issues related to the poor state of sanitation in the Philippines, and commitments were made to develop water safety plans, septage management plans and drinking water quality management committees. More than 200 participants representing water service providers, LGUs, national government agencies, nongovernmental organizations, donors and other experts, discussed the linkage between recent outbreaks of water-borne diseases and the need for water utilities to develop water safety plans and start providing sanitation services to prevent future outbreaks. The PSA project participated in the summit, held July 9 to 10 at the Asian Development Bank in Manila, by sponsoring the participation of city government and water district staff from Cagayan de Oro, Calbayog, Dumaguete and Zamboanga, and handing out information materials at an exhibit booth.

D. Santa Rosa City Breaks Ground for New Hospital Treatment Plant

In simple groundbreaking rites, Mayor Arlene Arcillas-Nazareno of Santa Rosa City led the symbolic launch of the new wastewater treatment facility for the Santa Rosa Community Hospital last July 30. In her speech, she underscored the importance of not just focusing on the need to clean up each individual house but also taking care of the overall environment as it affects everyone. She thanked USAID for being a strong partner of the city in its drive to protect the environment and prevent widespread pollution. She stated her support for the objectives of the project and her commitment to ensure the proper implementation of the Clean Water Act in Santa Rosa.

The highlight of the event was the ceremonial lowering of the time capsule. It was witnessed by heads and staff of the City departments, officers and staff of the Santa Rosa Community Hospital, USAID PSA representatives, members of the Santa Rosa Medical Society, and nearby residents. Dr. Parnell Patacsil, Medical Director of the Santa Rosa Community Hospital, expressed his great appreciation for the project especially since his was the only hospital in the district which has no proper sewage treatment facility. Final procurement activities and construction will take place in August.

E. PSA Partner MEDCO Assists in Information Campaign

In August, PSA partner Mindanao Economic Development Council (MEDCO) placed the PSA Sanitation Technology Information Kit files on its website (<http://www.medco.gov.ph>, downloads, technical papers). Next steps include sourcing funds to print copies of the kit so they can be distributed at future MEDCO workshops.

F. Hospitals Develop Action Plans to Treat Wastewater

Hospital administrators, presidents and owners, together with other stakeholders, developed action plans for treating their wastewater during the Appropriate Technologies and Financing Options for Hospital Wastewater Management Workshop on August 12 in Pasig City. During the workshop more than 100 people learned about the requirements of the Clean Water Act (CWA) of 2004, technology and financing options that are available for the proper treatment of hospital wastewater, with a focus on sewage treatment rather than infectious and hazardous waste. The workshop was opened by USAID's Acting Deputy Director Aye Aye Thwin and Department of Health Secretary Francisco Duque III. The workshop featured two case studies from Iloilo Doctor's Hospital and St. Luke's Medical Center. During the break-out group discussions, the participants identified the top three issues as: the need for an information campaign on technologies and the Clean Water Act, technologies appropriate for small spaces, and funding prioritization of local governments and hospitals. The workshop was organized by the USAID PSA project, with partners Philippine Health Association (PHA), Department of Environment and Natural Resources and Department of Health. During his closing remarks, PHA President Dr. Tiburcio Macias announced that the PHA Board approved a resolution lauding the efforts of the PSA to reach out to PHA members to understand this very important issue. He further pledged

to replicate the workshop in other areas of the country to encourage compliance of its members with the CWA.

During the workshop, several companies offering engineering design and construction services had exhibit booths set up to showcase their capabilities. On August 13, two site visits were conducted to St. Luke's Medical Center and the University of Sto. Tomas Hospital, which both have wastewater treatment systems.

G. Davao City Water District Holds Septage Management Workshop

A one-day workshop on Septage Management, organized by the Davao City Water District with support from the USAID PSA project, was held on Thursday 14th August, 2008. The workshop was attended by 129 people from various government agencies, private companies, universities, local non-government organizations and other donor-funded projects.

Speaking on behalf of the city mayor, the city engineer said that while water pollution is recognized as a threat, the city has not yet dedicated resources to a wastewater facility since the focus is still on solid waste. He said the workshop provided an opportunity for the different stakeholders to take action on the water pollution problem. A representative from the regional DENR office spoke about the provisions of the Clean Water Act while the other PSA speakers shared information on the components of an effective septage management program and sustainable financing solutions for a wastewater facility.

During the small group discussions, the participants prepared inputs for a septage management program, including regulation, transportation and collection, treatment and disposal and institutional arrangements. The vice-chair and chair of the City Council Committee on Environment and Natural Resources gave closing remarks and expressed their support for the program. Feedback from the participants was very positive and enthusiastic. The following day, a smaller group met to consolidate the workshop outputs and prioritize the next steps. The water district will now develop a more coordinated partnership with the city government and create a technical working group.

H. PSA Specialists Speak at Bicol Hospital Orientation and Planning Workshop

PSA Specialists talked on technology and financing options at a Bicol regional hospital orientation and planning workshop last August 20 and 21. Well attended by the different government hospitals in the whole Bicol region, the participants learned of low-cost technologies for wastewater treatment facilities as well as options to fund wastewater projects. The seminar/workshop was sponsored by the Regional Center for Health Facilities under the Department of Health (DOH). It was most encouraging to see the enthusiasm of the participants to include a wastewater facility in their investment plan for the following year. Several of them asked for capability building interventions or assistance for their hospital engineers. One of the participants was from the Bicol Regional Training and Teaching Hospital (BRTTH) who showed readiness to pursue a wastewater project. On August 21, PSA met with the BRTTH engineer for an ocular inspection of the proposed site and an initial discussion about the project.

PSA consultants also visited the proposed septage treatment site of Naga City Water District (NCWD). The area, about five hectares, is now in the final process of negotiation with the local LGU, Magarao municipality, and with the owner of the land. The NCWD is seeking PSA's assistance in its promotions campaign once the land negotiation is completed.

I. PSA Partner C TRADE Philippines Finances Biogas Projects for Business Groups

The PSA brokered a meeting between the Laguna Lake Development Authority (LLDA), the San Mateo Hog Raisers Association and C TRADE Philippines to explore collaboration that will utilize hog waste to produce biogas while reducing pollution loading in the watershed. The 15 hog farms that were represented at the meeting release a total pollution load of about 650 cubic meters of high strength waste every day. According to Dr. Prabhu Dayal, President of C TRADE, "This translates into roughly 6500 kg (7 tons) of BOD that can be diverted from the lake every day. If we can help the operators turn this waste into a resource to produce energy, we can help them cut operating costs while significantly reducing the amount of pollution that enters Laguna Lake." C TRADE Philippines will begin working with the individual farm owners to develop biodigesters on a build-operate-transfer basis and apply for carbon credits. This effort can then be replicated throughout the Laguna de Bay region.

C TRADE will also finance a mixed waste processing facility to be located in Baras, Rizal. The project, again brokered by the PSA, links C TRADE with the Baras Business Council to provide a treatment, reuse and recovery facility to reduce pollution loading in this critical watershed of Laguna de Bay. The facility will process hog manure, septage and restaurant grease to produce electricity from biogas, and fertilizer as a by-product of the process. The planned \$160,000 facility will be built on a 1 hectare site provided by Baras Mayor Wilfredo C. Robles. The project will provide a direct benefit to the 30,000 residents of Baras Municipality by reducing pollution and providing an example of a sustainable technology for mixed waste treatment. C TRADE will also apply for carbon credits to recoup their investment.

J. PSA Helps Train Sanitary Inspectors during Annual Convention

Sanitary inspectors of the Philippines met for their annual convention in Baguio September 3-4 for a workshop on environmental health enforcement and promotion. Sanitary inspectors are on the front line of local governments' efforts to promote environmental health through education and regulatory enforcement of standards for water, sanitation and food safety at public buildings and licensed establishments. The PSA provided training to the group on the Department of Health's 2008 rules regarding the management of domestic sludge and septage. The 566 attendees included sanitary inspectors, health officers and city and municipal environmental officers from LGUs throughout the Philippines.

K. CDO Pursues Wastewater Treatment Projects

The City of Cagayan de Oro, in its bid to position the city as a tourist destination with its river as the main attraction, intends to install an interceptor and a wastewater treatment facility along the CDO River. The river runs through the city proper and reportedly receives a wastewater flow of

approximately 8,000 cubic meters per day from 7,863 households and commercial establishments within the area.

During a roundtable discussion on September 9, the General Manager of the water district agreed to operate the treatment facility and collect any user fee that the city government may wish to charge as long as it is covered by an ordinance after conducting a public forum. The amount collected will be ring-fenced for the project's maintenance and future expansion.

The said project was identified after the PSA technical working group (TWG) prioritized several interventions in the action plan that was developed during the stakeholder workshop in March. The other priority projects include construction of small anaerobic baffled reactor sewage treatment plants for the Calaanan resettlement site and Barangay Iponan. The TWG hopes to make these small pilot projects a showcase for bigger subdivisions and as a prelude to a citywide campaign for septage management. Funds for these projects will come from the 20% socialized housing fund being managed by the Housing Board. Use of the funds for the wastewater projects was agreed to by Mayor Jaraula during a meeting with PSA specialists.

L. Sanitary Engineers Formulate New Roles to Address Sanitation Issues

The Department of Health (DOH), in collaboration with the PSA, organized a training workshop for sanitary engineers (SEs) on September 23-25 at the Imperial Suites, Quezon City. Entitled "National Consultation and Training for Sanitary Engineers on Appropriate Wastewater Treatment and Other Issues," the training focused on the role of sanitary engineers in implementing the Clean Water Act (CWA). The event brought together 132 representatives from DOH offices nationwide and from the central office. In small groups, they identified the issues and problems they normally encounter in the discharge of their duties and developed a list of new roles to address the issues.

The resource speakers oriented them on the CWA, underlining the need for technological alternatives and suggesting possible low-cost solutions to address the high cost of putting up wastewater and septage treatment facilities. The participants identified the following issues confronting them: weak LGU enforcement of national laws on sanitation; weak coordination between DOH and the Environmental Management Bureau at the regional level; lack of recognition of SEs; inadequate support from central offices of DOH, EMB and other agencies; unclear role of SEs in the organization; lack of policy for SE item or plantilla position in cities and municipalities; lack of appreciation and understanding of local chief executives on sanitation issues and programs; and lack of training for SEs and sanitary inspectors. The group developed the following recommendations: organizing campaigns and meetings to create awareness among local chief executives on the sanitation situation at the local level; preparing plans and training proposals to boost human resource development, and formulate qualification standards for hiring; capacity building among SEs and sanitary inspectors; strengthening of cooperation among DOH and EMB offices at the regional level for implementation of location-specific sanitation programs; exploring innovative financial mechanisms to scale up support for sanitation projects; and many more.

On the third and final day of the training, 110 participants visited either Marikina City Hall, where they were briefed on the household septage management program, or Puregold warehouse in Quezon City to see the wastewater treatment plant.

M. Metro Cebu Holds Septage Management Promotions Workshop

The Metro Cebu Water District and the USAID PSA sponsored a training workshop for promoting septage management in Metro Cebu. The two-day workshop was attended by representatives from the academe, civic organizations, non-government organizations, local government units and other government agencies. The workshop aimed to get support from the participants in promoting septage management and also to develop skills in developing a promotions plan.

PSA first presented the basics of septage management and later discussed the mechanics of an effective promotions campaign. An enthusiastic and participatory discussion ensued during the workshop proper, which answered queries and raised some recommendations for proper septage management. The training will hopefully commence the process of developing a promotions campaign for Metro Cebu households to regularly desludge their septic tanks. The PSA team also met with the mayor of Cebu City to discuss septage management. The mayor said he is willing to request that the SM mall wastewater treatment facility be enlarged to accommodate septage. The administrator suggested that for a starting point, the SM facility could be scaled up to accommodate the septage loading from the existing volume of septage at current levels from all of the private desludgers now operating, plus 2 or 3 barangays that the mayor would start with on a scheduled desludging basis. The administrator said the city could possibly purchase 2 new vacuum trucks to support a small septage pilot project. The PSA team presented the DOH septage and sludge rules to the mayor and advised him of the LGU responsibilities referenced in that document.

N. PSA Promotes Sanitation at the Subdivision Developers' Annual Convention

On September 25 and 26, the Subdivision and Housing Developers Association (SHDA) held its annual convention in Cebu City to present the latest innovations and information relevant to housing developers in the Philippines. The SHDA president invited PSA to present at the convention following his attendance at the PSA's technology/finance workshop for the housing industry earlier in the year. PSA Senior Sanitation Advisor Dave Robbins gave a presentation on low-cost options for treating and recycling wastewater for subdivisions. The convention was attended by 250 representatives of large and medium-sized development companies, banks and materials manufacturers in the Philippines. The talk was well received and there were numerous requests for continued networking between PSA and SHDA, especially for continuing training opportunities on wastewater treatment for their members.

IV. Management and Finance

The project is on track in terms of overall management, reporting and expenditures. A proposal to expand the project in scope, budget and time was submitted to USAID in late September.

V. Performance Objectives for Next Quarter

During the next quarter, AECOM will focus on the following:

- Conduct a two-day technology-finance workshop for the hotel and restaurant hospitality sector, and follow up on suggested next steps.
- Conduct promotion toolkit review and training workshop with partners.
- Support the four PSA and six former LINAW cities in developing and completing their planned pilot projects, with a focus on implementation of septage management programs.