A. Basic Data
1. Activity Title: Smokey Mountain Remediation and Development Project (SMRDP)
2. ADB Project Officer: Mr. Michael Lindfield, Senior Housing & Finance Specialist
3. Request Date: March 3, 2005
4. Implementing Organization: Sustainable Project Management (SPM)
5. Types of Interventions: Pilot Project
6. Amount of Request: USD 229,500
7. Period this funding request will cover: May 2005- December 2006

B. Description of Implementing Organization(s)
Sambayanan Kristianong Muling Pagkabuhay (SKMP) is a people’s organization duly incorporated with the S.E.C. in 1991. SKMP is composed of 3,000 families residing in Smokey Mt., Balut, Tondo. SKMP was established to provide self-help programs geared to uplift the lives of the poor communities in Smokey Mt. SKMP manages a number of programs including education and cultural programs, the establishment of a cooperative and a microfinance facility for livelihood and other income generating activities. SKMP has been operating a “material recovery facility” and a small composting plant. It has organized its members into approximately 150 cells with a membership of 20 families each. SKMP has significant experience working with the communities on and around Smokey Mountain and no organization is better equipped to address their specific needs and promote their long-term goals and aspirations. SKMP address is ‘Permanent Housing’, Smokey Mountain, Balut, Tondo.

SPM is a not-for-profit international business development agency established in 1994 to implement outcomes of the 1992 Earth Summit. SPM’s objective is to create locally owned public-private partnerships (PPP) that operate commercially viable businesses to provide improved waste, water and energy services to developing communities. SPM uses the PPP model to create these businesses. SPM has worked in Latin America, Africa, and Eastern Europe and currently engaged in municipal solid waste project in the Philippines, and in the Pacific region. SPM has been operating in RP for 7 years and currently registering a local office in the Philippines. More information on SPM and staff profile in Appendix A.

SKMP and SPM have entered into a partnership to harness the complementary skills of the two organizations needed for the successful implementation of the proposed SMRDP.

C. Proposed Subproject
1. Background and Rationale: There is great concern regarding the exposure of the communities residing in Smokey Mountain to the remaining mountain of waste adjacent to the social housing complex. Studies have indicated that impacts such as gas generation within the landfill and migration of leachate off-site will continue, as long as the residual waste remains unmanaged. The waste continues to burn and residents complain of suffering from headaches, nausea and labored breathing, in addition to the irritation caused by smoke and smell permeating the area. Previous excavation of Smokey Mountain has left near vertical faces of waste that pose an immediate risk of a landslide like that which occurred in Payatas. In close proximity to Smokey Mountain is Pier 18, which the City of Manila is currently using as a temporary disposal area for its municipal solid waste. The situation in Pier 18 is unsustainable from a humanitarian, public health and environmental standpoint. Unless action is taken to rectify conditions at Pier 18, the site could rapidly become another Smokey Mountain. More information on Smokey Mountain is included in Appendix B.

To remove the long-term risks from this community whilst improving the livelihood of the large numbers who rely on the waste businesses, would be a significant humanitarian and environmental step forward. With this goal in mind, a draft Concept was prepared by Sustainable Project Management (SPM) in collaboration with the SKMP. The proposed program has two phases: (1) Remediation of the Smokey Mountain dumpsite; and (2) Closure of Pier 18 and Conversion of Smokey Mountain into an Ecologically- managed Waste Facility.

The proposed project relates to two important areas of ADB operations in the Philippines – low income housing and solid waste management. The ADB has programmed a $50 million loan project, the Metro Manila Urban Services for the Poor (MMUSP) project for 2005. The proposed project will pilot approaches to housing involving environmental rehabilitation, a situation unfortunately common in Metro Manila. The ADB has just completed an Advisory Technical Assistance project which was developed as an over-all assistance strategy for solid waste management in Manila.
The proposed project has been designed to present an opportunity to rehabilitate the site and remove or, at the very least, greatly mitigate the long-term health risks whilst improving the long-term earning capacity of the community by formalizing many elements of the waste businesses that are currently somewhat informal. In doing so it is envisaged that MMUSP will be in a position to focus more resources on essential services (housing and infrastructure) as some of the challenges with solid waste collection and disposal.

To ensure that the most cost effective environmentally sustainable solution is selected, the program will require “action research” to: (a) investigate the most feasible option, and (b) build coalitions between the Government, the Community and the Private sector. It is vital that the essential political will is maintained and that there is a development of trust between the City of Manila, the community at Smokey Mountain and the selected Private sector partner.

The proposed project acts as a pilot intervention seeking to demonstrate innovative public-private-community institutional arrangements, participatory approaches (by involving communities in the project implementation process), innovative technical solutions, and actions to build sustainable livelihoods. The project has clear potential for successful replication, in that such dumpsites are common in the Philippines and similar concentrations of scavenger communities are found in surrounding areas in other developing countries with conditions similar to the Philippines. The project will also include an element for targeted analytical studies – action research aimed at removing institutional, organizational, technical, and financial barriers to improved environmental management at the local level, and dissemination of lessons learned.

However, implementation of the strategy will be dependent on government coordination of numerous agencies and local governments involved. While such activities are being initiated, it is important for the ADB to remain engaged in the sector and to explore potential modalities of support which are a) pro-poor; b) community and local government driven; and c) not dependent on national government budget. This project pilots such an approach. The urban sector is a focus sector in the Philippines CSP and will continue to be in the new CSP currently being prepared.

The proposed project responds directly to the PEP program objectives covering all three:

- Protection, conservation, and sustainable use of natural resources and ecosystem services to maintain the livelihoods of the poor, through establishing a community-based, sustainable waste processing and recycling facility in the area (MRF), employing communities.
- Reduction of air and water pollution and waste that directly impacts the health and productivity of the poor through better management and remediation of existing dumpsites and,
- Reduction of vulnerability to natural hazards and disaster prevention, such as avoidance of future collapses as occurred in the Payatas dumpsite.

2. Objectives:

The objective of the proposed Smokey Mountain Remediation and Development Program is to develop a methodology to improve the quality of life and livelihood of 30,000 people of the Smokey Mountain Community through

- Identifying a cost effective remediation program for Smokey Mountain that will provide long term protection for the community and the environment;
- Demonstrating a sustainable PPP mechanism for the implementation of an effective ecological solid waste management program; and
- Developing employment and other livelihood opportunities for the poor through activities associated with the establishment of the MRFs (i.e. recycling, composting, etc).

The targeted beneficiaries are the Smokey Mountain community comprised of the residents, commercial establishments and institutions located in the Tondo vicinity. In addition through the SKMP network, some 20,000 low income farmers engaged in organic farming will benefit from the project. The beneficiaries will participate in the implementation of the studies through community surveys and consultation workshops, as well as in the actual project implementation, specifically in the day-to-day operations of the Manila City’s Material Recovery Facility (MRFs). Benefits will come through the community’s increased awareness of environmental and social issues, opportunity to raise the key concerns, and provide input into project implementation design and development and strengthening of their entrepreneurial skills. If the proposed remediation is successful, the site may become eligible for improvement under the MMUSP.
3. Scope of Work/Description of Proposed Approaches

The project team will be led by SPM. SPM has the capacity to undertake the proposed activities and in coordination with SKMP have been implementing some key components. These have involved other key stakeholders such as the City of Manila, the Department of Environment and Natural Resources (DENR), the National Housing Authority (NHA) and House Guarantee Corporation (HGC), and private sector groups, and the Manila Eco-Aide cooperative representing the informal waste pickers.

1. Development of the Public-private partnership (PPP) for the remediation of Smokey Mountain and implementation of the ecological solid waste management project. SPM will conduct a brief study to determine the most viable PPP option and guide the LGU in the selection of the private sector. SPM’s input on technical design of installation, designing of the user fee, financing package will be critical to the selection process. Ultimately, the City of Manila must secure commitment from private contractors and private sector investors for development of the project. To date, there are more than 50 proposals from private sectors sitting on the Mayor’s desk. Specifically, two proposals stand out: Pro-Environment Group (representing German company) and Hi-tech Bioenergy Inc. (representing an Austrian-Taiwanese firm). Both groups are seriously vying for the project and have agreed to the principles of the PPP mechanism. It is the task of SPM to ensure that the proposals are shaped to satisfy the project goals: poverty alleviation and environment goals.

2. Business Planning to determine the financial viability of the project, including employment opportunities for the poor communities. Preliminary overarching business models have been prepared and these must now be integrated with specific offers from the private sector and the community needs of the project. The model will also include a complete breakdown of the collection, processing and disposal of waste. SPM have reviewed almost every possible approach and identified successful private sector operators in the City of Manila who can bring significant value to an integrated solid waste collection and disposal scheme. Just as importantly this review has identified some very significant inefficiencies that need to worked through and eliminated.

It is also vital to carry out some risk analysis to identify and characterize any constraints on project implementation and measures to address these risks. SPM will lead the financial and risk analysis with stakeholder input employment opportunities. The Private Sector will also undertake their own financial viability analysis.

3. Oversight of an environmental impact study by Manila City to determine (i) the nature and extent of current environmental and/or health impacts due to the waste at Smokey Mountain, and (ii) the nature and extent of any potential environmental impacts associated with the remediation project. This will include soil, groundwater and landfill gas investigations. EIA will be carried out through local consultants with input from SPM and guidance from the DENR as required. SPM is closely coordinating with the DENR’s National Solid Waste Management Commission whose mandate is the implementation of RA 9003.

4. Project implementation which entails a two phased approach: the remediation of Smokey Mountain and the establishment of an Eco Waste Park with the following features: a sanitary landfill, a material recovery facility (MRF), Composting facility and if viable a waste to energy project. The private sector will be responsible for implementing the remediation and construction and operation of the Eco-Park. (A diagram is presented on proposed solid waste management scheme is presented in Appendix C.)

5. Establishment of the MRF. In addition to the centralized MRF that will be established in the Eco-Park, the City plans to set up 3 other barangay/community MRFs. These MRFs will be managed and operated by the scavenger communities that will be organized into cooperatives. PEP funding will be used specifically for implementing the following activities:

- Organizing the scavengers into cooperative(s) including hosting consultation workshops;
- Capacity building activities including conducting skills training workshops for enterprise and market development
- Preparation of the MRF’s technical design and business plan and development of a financing package in conjunction with the communities;
- Establishment of the 3 community MRFs (see details in Appendix F).
- Information, Education and Communication to increase public awareness and participation in the City’s Ecological solid waste management program.
4. Workplan and Reporting

**Timetable:** A 1.5 year time frame for PEP subproject implementation. (See Appendix D)

**Reporting schedule:** A bi-monthly progress report will be submitted to the ADB implementing officer and a final report that will describe a) the project results, i.e. the achievements and shortfalls of project implementation, b) the factors influencing the projects results and c) the lessons learned and recommendations for project replication.

Initial planning milestones and deliverables will be reviewed in the first project planning meeting and stakeholders will be included in these targets. Project scheduling and critical path management tools will be utilized to ensure that performance targets and milestones are achieved.

5. Expected Outputs and Outcomes

Input & activity indicators are as follows:

The key outputs for the Smokey Mountain Remediation and Development Program include:

- A rehabilitated dumpsite and establishment of an ecological solid waste management system through a PPP mechanism, including an MRF component as shown in diagram in Appendix C).
- Strengthened capacity of the association of waste pickers to manage and operate the MRF and associated businesses derived from recycling and composting activities
- Improved living and work conditions for the waste-pickers of Smokey Mountain
- Improved health and environment conditions for the communities in Smokey Mountain and Manila as a whole

The expected outcome of successful implementation:

- Increased community awareness and participation (897 barangays targeted for completion in Year 2)
- Increase in number of waste and supporting businesses established (3 scavenger association operated MRFs, a private sector operated Eco-Park with Sanitary landfill, an MRF composting facility)
- Increase in number of people employed by the facility (up to 1200 directly and formally employed)
- Increased quantities of compost and recycled materials (20% of waste diverted for recycling and composting in Year 1)
- Reduction in air and water pollution (decrease in incidences of illness, i.e. water-borne, respiratory and potential carcinogenic illnesses)
- Replication and potential in the other urban centers in the Philippines
- Increased capacity of the LGUs to implement similar environmental infrastructure projects, i.e., waste, wastewater
- Potential CDM (methane emissions capture) project that would increase the project’s financial viability

Constraints/Risks:

- The Integrated Bar of the Philippines has threatened to sue the City of Manila for non compliance of RA 9003. IBP has successfully applied pressure on the City and the Mayor has recently established a Solid Waste Management Committee and directed the City’s Dept of Public Sanitation to complete and submit their SWM plan to the DENR.
- Social acceptance of the commercial establishments located in the vicinity. Public consultations will be held in conjunction with the EIA process which would give the private sector group opportunity to present environmental and social safeguards associated with the project.
- NIMBY attitude as a barrier to acquisition of land. In contrast, Smokey Mt. provides a unique situation in that the communities living nearby are eager to participate in the proposed project. The NHA and HGC, two national agencies with jurisdiction over Smokey Mt. property, are in agreement to the project concept but would like to negotiate the terms of their engagement with the PPP, either as a land owner, a partner etc. The NHA and the HGC’s nod of approval will be contingent on their potential return from the land.
- Financial risks - The project must remain profitable and the City must be prepared the address the business model shortfalls with additional user fees or similar.
- Private sectors’ proposals while viable do not satisfy the wider goals of the project with respect to poverty alleviation or financial structuring but both are worthy of further detailed consideration. It is noted that while these proposals were offering financing packages, the resulting loans placed all of the financial burden on the City of Manila – this is neither viable nor appropriate within the structure of a Public Private Partnership. With SPM’s intervention it is clear that both proposals could be shaped to satisfy the project’s needs.
6. Subproject Evaluation and Information Dissemination

Project evaluation will be participatory in approach involving all key stakeholders, including the DENR, the Smokey Mt. Community, the City of Manila and the private sector. All training and workshops undertaken will include a specific evaluation procedure.

Success stories and lessons learned will be disseminated through: (1) other Mayors and LGUs invited for study tours; (2) the DENR National Solid Waste Management Commission responsible for monitoring the implementation of RA 9003; (3) SPM’s website, publications and conferences which promotes the PPP mechanism for implementation of environmental infrastructure at the global stage.

7. Scope of Replication/Use in other DMCs

SPM will serve as the likely dissemination mechanism as there are numerous similar solid waste problems throughout the Asia Pacific Region that could benefit from a sound effective working example of a PPP solution as applied to an Integrated Solid Waste Management Project. SPM is currently implementing this scheme in Candon City, Ilocos Sur where 6 other LGUs adjacent to Candon have expressed interest to work in a cluster. Other LGUs where SPM has received expressions of interest are in Cebu, Bulacan, Nasugbu, Batangas Province and Legaspi City in Albay. The DENR is also interested to work with SPM towards replicating the PPP mechanism in other DENR target areas. SPM contacts in DENR include Mr. Albert Magalang and Ms. Raquel Tandug of the National Solid Waste Management Commission.

D. Cost Estimate and Disbursement Schedule

Total Budget: US$ 317,000 – 347,000
Amount Requested: US$ 229,500
Partner Contribution: US$ 87,500 – 117,500
(Budget details in Appendix E).

ADB funding will be used to jumpstart project implementation that eventually will be funded by the private sector investment. The private sector will enter into a joint venture with the local government unit (the City of Manila) and engage the community, through employment or other livelihood opportunities provided by the establishment of the eco-waste facility (i.e. recycling, composting, etc).

E. Proposed Subproject Management System

Describe how the proposed subproject will be managed, monitored, and reported.

SPM Project Manager (full time-based in the Philippines) will be responsible for the overall co-ordination of the Project. There are five elements of work that will be specifically managed by each of the stakeholders involved.

- Social Preparation/Community Consultations/Skills Training – SKMP
- PPP development/Technical study/Risk Analysis – SPM consultants
- Financial study/Project Implementation – Private sector; SPM to provide oversight
- EIA – SPM to provide oversight

SPM project manager will be responsible for monitoring PPP activities (i.e. private sector and LGUs) and reporting to the ADB project coordinator all activities of the various project components. The Project Manager will ensure that the other skills available from the SPM group are brought into project development as required. The Project Manager will be supported by SPM’s Programme Manager (Asia/Pacific) and an SKMP representative to ensure all the ADB’s reporting requirements are met in full and on time. SKMP has seconded the services of an environmental engineer to provide technical support to their organization.
Appendix A

SPM ‘s Track Record

SPM is an independent, “not-for-profit” organization registered in Geneva in 1994. SPM was created following the Rio Earth Summit in 1992 to develop and structure “eco-efficient” public-private business partnerships in support of increased access to environmental services such as waste, water, and energy in developing countries in the USD $2-30 million investment range.

In 1998, SPM assisted the International Maritime Organization (IMO) in the development of a solid waste scheme with a waste-to-energy component for Batangas Province. The early results of the feasibility study show that the project is viable. SPM has been involved in numerous solid waste projects - often with waste-to-energy projects - in Asia and the Pacific including Samoa, Bali, and the Philippines. Other projects have included a Solid Waste facility in Caldas Columbia, an Energy Service Company in Costa Rica, District Heating in Slovak Republica and a Water Treatment Plant in Namibia. These projects were developed by SPM in partnership with the UNDP using a Project Development Facility from 1995 – 1999.

SPM track record includes: 1. Samoa Waste to Energy Project, 2. Batangas Province ISWM Scheme, Philippines, 3. ESCO Costa Rica, 4. Solid Waste, Caldas Columbia, 5. District Heating, Spissa Nova Ves, Slovak Republica, 6. Water Treatment Plant, Namibia, and numerous Projects in development in Asia and the Pacific. SPM has been working in the Philippines since 1997 and more recently has developed initiatives with a number of municipalities looking to satisfy the requirements of Republic Act 9003- The Ecological Solid Waste Management Act of the Philippines. SPM has operated in the Pacific region since January 2000 with the support of New Zealand’s Official Development Assistance program (now NZAID).

In all these projects, the development of environmental infrastructure is and was a principle goal but the key to successful implementation has been the empowerment of grassroots entrepreneurs and previously disenfranchised community groups through direct involvement in the decision making. SPM’s “Public-Private Partnership” mechanism has always recognized this as a key tenet of sustainable development.

SPM is based in Switzerland. SPM is a virtual organization and retains the services of eight staff including two staff in the Philippines. Fields of expertise can be found on the web site but are very strongly focused in waste management, environmental projects and development issues. SPM has an annual operating budget of approximately US$350,000.

Address: Geneva Executive Centre (GEC)
Chemin des Anemones 11-13
1219 Chatelaine, Geneva,
Switzerland
www.spminternational.com

SPM staff and capabilities

The SPM team includes people with extensive experience in working with poor communities, civil society, and municipal authorities, both in the Philippines and elsewhere in S E Asia. The team also has business and PPP development skills, engineering skills, experience in brokering relationships between the various stakeholders of a PPP such as those agencies listed above, and environmental and scientific impact and assessment skills.

Ms Anita Celdran, SPM Representative – Philippines since October 2003. Ms. Celdran has 15 years experience in policy advocacy, training and evaluation of sustainable energy and environmental programs. In 1997, she worked for the International Institute for Energy Conservation in Washington D.C., coordinating the climate change outreach program funded by the US EPA, including CDM consultation workshops. She joined the Civil Engineering Research Foundation as a project manager of the Environmental Technology Evaluation Center supervising the evaluation of several innovative environmental technologies, and as the Energy Advisor to the US-Asia Environmental Partnership Program providing direct technical support for the US-AEP secretariat in Washington D.C. She briefly worked in the Environment Division of the World Bank conducting an evaluation of “stakeholder participation” in the GEF’s Climate Change portfolio. Before taking residence in the United States, Ms. Celdran was the National Campaigns Manager of Green Forum-Philippines, organizing grassroots events, planning and consultation workshops on sustainable development.
and training seminars on ecological solid waste management for local governments. She was actively engaged with lobby efforts for the legislation of the Philippines Clean Air Act, the Ecological Solid Waste Management Act 2000, and the NGO lobby network during the international climate change meetings. Ms. Celdran holds an MA in international development policy from Duke University, USA.

Mr Martin O'Neill, Technical Director – SPM Asia/Pacific. Mr. O'Neill joined SPM in 1999 and has been responsible for the technical aspects of project work in Batangas (Philippines), Vietnam, Azerbaijan, Indonesia, Samoa and the Cook Islands. Prior to joining SPM Mr. O'Neill was the Indonesian country manager for Parsons Brinckerhoff, principally focused in the energy sector. This role also included regional responsibilities in the Philippines and Brunei. Mr. O'Neill was also the President Director of Fletcher Construction Indonesia from 1994-1997. Prior to joining Fletcher Construction Mr. O'Neill was the Technical Manager of an Indonesian JV engineering consultancy and then Division Manager of Special Projects for Beca Carter Hollings and Ferner NZ Ltd. from 1983 – 1994. During this time Mr. O'Neill specialized in geotechnical, water and wastewater engineering, often in remote locations.

Ms Perya Short – Development specialist, especially gender-in-development, Programme management Asia/Pacific, donor liaison. Joined SPM in 2000. Prior to this, Ms Short worked for the New Zealand Ministry of Foreign Affairs from 1990 – 2000. During that time, Ms Short was involved in managing New Zealand’s political and economic relationships with Japan, and then the EU. Ms Short was posted to the New Zealand Embassy in Bangkok from 1992 – 95 and managed the NZODA aid programme for Thailand, Laos and Cambodia. From 1997 – 2000, Ms Short worked in NZODA in Wellington and was responsible for relations with the UN, the multilateral organizations and the Development Banks including the ADB. Ms Short also developed a new multilateral environment programme for the Pacific region prior to leaving NZODA.

Hugh Faulkner – Executive Chairman of SPM, of which he is a founding associate. Mr. Faulkner was a Member of the Canadian Federal Parliament from 1965 to 1979. Mr. Faulkner subsequently held several senior positions with Alcan Aluminum Ltd. As Secretary-General of the International Chamber of Commerce (ICC) in Paris (1989-1990), he organized industry's participation in the UN Conference on Sustainable Development in Bergen, Norway, in 1990. Mr. Faulkner was Executive Director of the Business Council for Sustainable Development (BCSD) responsible for providing a business / industry perspective to the Rio 1992 Conference (1990-1994). Mr. Faulkner developed Sustainable Project Management as an initiative of the BCSD. SPM was subsequently spun off as an independent entity in January 1995.
Appendix B

Background Information on Smokey Mountain, Balut, Tondo

Smokey Mountain is a 2,000,000 ton garbage heap, which has served as a waste disposal facility for Metro Manila for over 40 years. The garbage dumpsite was home to a huge squatter community, who scavenged through the garbage to survive. It is estimated that 30,000 people live around the dumpsite. Community leaders have revealed that 80% of the community derive their income from waste recycling directly or indirectly, earning approximately 200 pesos (3.50 US dollars) per day. In January 1992, President Corazon Aquino approved a concept plan for the National Housing Authority to transform the area into a portside community, including a social housing project in Smokey Mountain. To date, twenty one medium-rise housing buildings have been constructed and the communities have been able to move into their new homes. Additional housing is planned on the site and such housing could be eligible for funding under the ADB’s forthcoming MMUSP project. While the new housing program has greatly improved living conditions for some in the area, there is much that remains to be done. However, in the current state of the area, the site could not be considered. Rates of disease and chronic infections are high amongst the waste workers and approximately 25% of the community have suffered some sight or hearing loss through long term chronic infections.

Smokey Mountain dumpsite closed in 1990. Edge of waste dump. Waste slumping failure has occurred. Person in photo is over 6’ tall.

Remaining waste and medium rise buildings. Note Waste dump and buildings similar height and in close proximity

Ponding of leachate runoff from remaining waste
Appendix C

Diagram on the Implementation of RA 9003
The Ecological Solid Waste Management Act of the Philippines

Implementing R.A. 9003
Ecological Solid Waste Management Act

Barangay MRF 1
Barangay MRF2
Barangay MRF3
Barangay MRF4
Town Center
Commercial & Residentials
MRF & Transfer Station
“ECO-PARK”
Centralized Disposal Facility For Residual Waste

Composting
Recycling & Composting
Waste to Energy (Anaerobic Digestion)
MRF - Recycling
Peso
Electricity
Peso

Separation at Source
Collection & Transfer
Disposal of Residuals
Value-Added Technologies (Optional)
Revenue

Composting Gardens

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## Workplan and Schedules

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Appendix D
Appendix E

Proposed Budget

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<td>1,500</td>
<td>3,000</td>
<td>3,000</td>
<td>Months 3,5,8</td>
</tr>
<tr>
<td>- Equipment (specify)</td>
<td></td>
<td></td>
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<tr>
<td>- Others (accommodation)</td>
<td>1,000</td>
<td>2,000</td>
<td></td>
<td>Month 3,5,8</td>
</tr>
<tr>
<td>3) Monitoring and Evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Consultants</td>
<td>54,000</td>
<td>54,000</td>
<td></td>
<td>8.33% per month 3-14</td>
</tr>
<tr>
<td>- Travel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Equipment (specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows Update.lnkyect (surveying, drilling and laboratory analysis)</td>
<td>20,000-50,000</td>
<td>20,000</td>
<td>40-70,000</td>
<td>8.33% per month 3-14</td>
</tr>
<tr>
<td>- Others</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) Establishment of MRFs &amp; Capacity Building</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Consultants (including local experts, NGOs..)</td>
<td>18,000</td>
<td>18,000</td>
<td></td>
<td>5.88% per month 2-18</td>
</tr>
<tr>
<td>- Travel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Equipment (specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Activities undertaken by the Eco-aide associations in setting up 3 community MRFs. - Others: organizing, training, consultations, IEC programs</td>
<td>20,000</td>
<td>20,000</td>
<td></td>
<td>5.88% per month 2-18</td>
</tr>
<tr>
<td>CONTINGENCY</td>
<td>10,000</td>
<td>20,000</td>
<td></td>
<td>As required</td>
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<tr>
<td>TOTAL EXPENSES</td>
<td>87,500 – 117,500</td>
<td>229,500</td>
<td>317,000– 347,000</td>
<td></td>
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</table>

*1. Estimated US$20,000 – US$50,000 contribution from the selected Private Partner. The total development value is expected to be approximately US$20,000,000. This cannot be included as it would distort the relative values.
Appendix F  The Community’s Role in the Establishment of the MRF

The following presents some insights to clarify the role of the community vis a vis the ISWM scheme with particular reference to the grassroots MRFs.

First of all, may we point out that while discussions have focused on Smokey Mt., in fact the project’s reach is much farther. Smokey Mt. and Tondo, in general, are at the heart of waste handling for the City of Manila and the grassroots MRF’s discussed in the proposal must be in sync with the City’s Plans. There are very large numbers of folk involved in formal and informal waste picking in Manila (and the Philippines) and it is vital that their livelihoods are protected. We noted however that there are inefficiencies in the current system - this is because waste from the City is handled two/three/four or more times with various individuals cherry picking specific items. This is often 'side of the road' sorting (hardly an MRF) - often only partially effective and environmentally messy and very inefficient. We have spent time with some of the recyclers and observed their operation (often at night in terribly, unsanitary hole-in-the-wall, facilities) and believe strongly that these waste pickers need to be recognised, organised and helped (improved working conditions and wages) and NOT disenfranchised.

Step 1 (out of a 4 step process) - engagement of the grass roots in Manila's Integrated Solid Waste Management (ISWM). SKMP will be vital in developing these grassroots cooperation - they are 'in the business', trusted and recognized, and an end user. There is inherent distrust of government be it local or national so it is vital that these systems are developed transparently by stakeholders who can see the whole picture and treat other stakeholders fairly. We have developed a draft concept paper for the City of Manila “Unbundling Manila's Waste Collection and Disposal - A Grass Roots Approach’ with specific reference to the development of the community MRFs. This has been discussed with the City officials and was well received.

Step 2 - moving the waste to a centralized facility (in this case Smokey Mt.). Interestingly enough often >50% of the cost of disposing of solid waste is tied up in moving it from source to the final disposal facility. Once this is understood the benefits of high levels of co-operation are well understood.

Step 3 - final processing - this is the Smokey facility we have written about at length. It will be the final processing arena and take organics for composting and digestion, recycled material for shredding/baling/packing and residual waste for disposal - once again SKMP will be closely involved in developing the community end of this - especially the development of jobs. If the private sector had their way this facility would be vastly expensive and run by a handful of engineers. However they concede there are human issues to contend with and with SKMP's help we will trade capital cost for jobs, which entails reducing the capital value and generating jobs.

Step 4 - product disbursement. This will involve selling compost, electricity, recycled goods and disposing of the residual waste and then ensuring that all parties are appropriately rewarded. SKMP will be an integral part of ensuring there is equality in this too.

As a final point please be assured that this project is not 'facility' driven. We were first approached by SKMP because they had read about the "PPP" methodology we promote and believed this approach may ensure their voice was heard in the harsh light of commercial reality and big business. They also wanted to ensure that Smokey was rehabilitated. We believe we have a methodology that is “people driven”, taking the best elements the Private Sector has to offer, and inserting them succinctly into a much larger system. The political landscape is favourable now and we are keen to proceed while the various elements are going in the same direction.