PROJECT PAPER

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROPOSED ADDITIONAL FINANCING OF SDR 5.3 MILLION
(US$8.0 MILLION EQUIVALENT)

TO

BOSNIA AND HERZEGOVINA

FOR THE

SOLID WASTE MANAGEMENT PROJECT

May 31, 2005

Infrastructure and Energy Sector Unit
South East Europe Country Unit
Europe and Central Asia Region
CURRENCY EQUIVALENTS
(Exchange Rate Effective as of May 31, 2005)
Currency Unit = Convertible Marka (KM)
1 KM = US$ 0.64
US$ 1.49 = SDR 1.00

FISCAL YEAR
January 1 – December 31

WEIGHTS AND MEASURES
Metric System

ABBREVIATIONS AND ACRONYMS

BiH - Bosnia and Herzegovina
CAS - Country Assistance Strategy
EA - Environmental Assessment
EDSGF - Economic Development Strategy Global Framework
EMP - Environmental Management Plan
EU - European Union
FBH - Federation Bosnia and Herzegovina
IDA - International Development Association
JICA - Japan International Cooperation Agency
NGO - Non-Governmental Organization
PIT - Project Implementing Team
PMU - Project Management Unit
RS - Republika Srpska
SIDA - Swedish International Development Association
SOE - Statement of Expenditures
USAID - United States Agency for International Development

| Vice President: | Shigeo Katsu |
| Country Director: | Orsalia Kalantzopoulos |
| Sector Manager: | Sumter Lee Travers |
| Task Leader: | Seema Manghee |
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**BOSNIA AND HERZEGOVINA**

**SOLID WASTE MANAGEMENT PROJECT**

**PROPOSED ADDITIONAL FINANCING**

**Credit and Project Summary**

<table>
<thead>
<tr>
<th>Borrower:</th>
<th>Bosnia and Herzegovina</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementing Agencies:</td>
<td>Federation Ministry of Physical Planning and Environment, Republika Srpska Ministry of Urban Housing, Civil Engineering and Environment</td>
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<tr>
<td>Description:</td>
<td>Waste Management for Rehabilitation of Landfill Sites; Engineering Services/Technical Assistance; Project Management and Operating Costs.</td>
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<tr>
<td>Amount:</td>
<td>SDR 5.3 million (US$ 8.0 million equivalent)</td>
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<tr>
<td>Terms:</td>
<td>Modified IDA terms with a 10 year grace period, a final maturity of 20 years, and service charge of .75% and a commitment fee of .50%.</td>
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<tr>
<td>Project Appraisal Document:</td>
<td>Report No. 23929-BiH</td>
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<tr>
<td>Project ID Number:</td>
<td>P095382 (Additional Credit), P057950 (Original Credit)</td>
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</tbody>
</table>

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BOSNIA AND HERZEGOVINA
SOLID WASTE MANAGEMENT PROJECT
PROPOSED ADDITIONAL FINANCING

PROJECT DATA SHEET

Date: May 31, 2005
Country: Bosnia and Herzegovina
Project Name: Solid Waste Management Additional Financing
Project ID: P095382
Team Leader: Seema Manghee
Sector Manager: Sumter Lee Travers
Country Director: Orsalia Kalantzopoulos
Environmental Category: B - Partial Assessment

Borrower: Bosnia and Herzegovina
Responsible Agency: Federation Ministry of Physical Planning and Environment; Republika Srpska Ministry of Urban Housing, Civil Engineering and Environment

Revised estimated disbursements (Bank FY/US$m)

<table>
<thead>
<tr>
<th>FY</th>
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<th>2007</th>
<th>2008</th>
<th>2009</th>
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<tr>
<td>Annual</td>
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<td>1.60</td>
<td>2.40</td>
<td>2.50</td>
<td>1.00</td>
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<tr>
<td>Cumulative</td>
<td>.50</td>
<td>2.10</td>
<td>4.50</td>
<td>7.00</td>
<td>8.0</td>
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</table>

Current closing date: February 29, 2008
Revised closing date: November 30, 2009

Does the restructured or scaled-up project require any exceptions from Bank policies? ○ Yes ☒ No
Have these been approved by Bank management? ○ Yes ○ No
Is approval for any policy exception sought from the Board? ○ Yes ☒ No

Revised project development objectives/outcomes
Not Applicable.

Does the scaled-up or restructured project trigger any new safeguard policies? No.

For Additional Financing

[ ] Loan [X] Credit [ ] Grant [ ] Guarantee [ ] Other:

For Loans/Credits/Other:
Total Bank financing (US$m.): 8.00
Proposed terms: Repayable in 20 years, including a grace period of 10 years.

Financing Plan (US$m.)

<table>
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<th>Source</th>
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<th>Total</th>
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<td>Borrower</td>
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<td>IDA</td>
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<tr>
<td>Others</td>
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</tr>
<tr>
<td>Total</td>
<td>1.30</td>
<td>8.00</td>
<td>9.30</td>
</tr>
</tbody>
</table>
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MAP: IBRD 33375
I. INTRODUCTION

This Project Paper seeks the approval of the Executive Directors to provide an additional credit in an amount of US$8 million equivalent to Bosnia and Herzegovina for the Solid Waste Management Project – Additional Financing (P095382). The proposed additional credit would finance the costs associated with a financing gap due to the higher costs entailed for the rehabilitation of landfills and clean up of wild dumpsites.

The project objectives of the additional financing would remain the same as for the original project. The main objectives of the original project are to: (a) cost effectively improve solid waste services in participating priority areas; (b) increase administrative and technical capacity for solid waste management at the local and Entity level; (c) improve cost recovery in the sector and encourage private sector involvement; and (d) correct environmental problems and reduce health hazards caused by inadequate waste collection and disposal systems. Specifically, the additional funding would be sought for the following: (a) technical assistance/engineering services; and (b) investments to rehabilitate regional landfills and clean up of wild dumpsites.

Selection Criteria. The main selection criteria for participating areas to be included in the project consisted of the following: self-selection (and ownership) expressed through the formal signing by participating municipalities of a joint Memorandum of Understanding (MoU) demonstrating willingness to cooperate in regional schemes and share costs; sufficient number of participating municipalities to ensure a service population greater than 150,000; range of physical and geographic conditions, and urban size; beneficiaries (the inter-municipal Utilities) must provide counterpart funding and repay the loan, and be willing to levy appropriate user charges to recover costs; and environmentally appropriate physical and geographic conditions of the landfill proposed for rehabilitation.

Regions included in the original project at preparation were: Banja Luka, Mostar and Tuzla. As part of the original project design, an unallocated amount of US$4.60 million was set aside to add regions during the first year of project implementation. Meanwhile, the Government of BiH attempted to seek co financing for approximately US$4-5 million to enable as many regions to be included in the project.

The Government and the Bank have sought additional funding from numerous bilateral and donor agencies since 2002. This has not resulted in any concrete commitments from any donors. However, the Bank has strong partnership arrangements in technical assistance in coordination with the European Union, JICA, SIDA and USAID. Environmental, financial, legislative and institutional training has
been held in coordination with these various partners. The objective of the numerous training is for the donors to jointly provide maximum training to sector personnel by sharing training programs and information dissemination and avoid duplication. This has led to a successful and coordinated technical assistance program by the donors for the solid waste sector.

During implementation, Bihac, Bijeljina, Sarajevo and Zenica were added to the project as they were the first regions to fulfill the selection criteria. The final selection of the regions in both project preparation and implementation was made by the Ministry of Urban Planning and Environment and the Ministry of Urban Housing, Civil Engineering and Environment. The line Ministries in coordination with the Entity Ministries of Finance have decided that the additional financing of US$8 million equivalent will be allocated between the regions already in the project: US$2.5 million for Bijeljina; US$1 million for Bihac; US$2 million for Mostar; US$1 million for Tuzla and US$1.5 for Zenica. Despite the waiting list from other regions to be included in the project, it was agreed with the Government that no additional regions can be added to the project at this stage due to the current financing gap with the regions already in the project.

The areas where the sites will be rehabilitated have all fulfilled the selection criteria. The site selection of the sanitary landfills was made to minimize environmental damage. To this end, all of the sites are ongoing operations where the project would improve disposal practices. From the investment and operating cost perspective, rehabilitating an existing operation is also attractive since the incremental costs are likely to be lower than constructing a completely new landfill.

The landfill sites were also selected in order to minimize the incremental costs per capita of population served. To this end, a proper balance was struck between the economies of scale of combining landfills for a number of municipalities, which would reduce investment costs per capita given the high economies of scale and the need to transport waste over longer distances (which varies in direct proportion to the number of persons served by a landfill site and in indirect proportion to the respective population density of the selected areas).

Social. Education and public awareness programs are underway in the regions at the local level through NGOs that are based in their respective regions. The topics cover solid waste issues such as the need for public cleanliness, the role of households in the storage and collection of domestic refuse, and health and environmental problems caused by illegal dumping of wastes in rivers and creeks, road sides, abandoned mines, or empty lots. The information campaigns also include information on the project, as well as public consultations during different stages of project implementation. Additionally, because the current limited and unreliable levels of solid waste collection services do not motivate the general population to pay associated fees, the information campaigns seek to promote a change of attitude from local residents with respect to payment of service fees by stressing that improved services can be possible with adequate revenue collection.
The project is generating positive environmental benefits by improving collection, transfer, and disposal of solid waste, and reducing illegal dumping in environmentally sensitive areas. Project financed activities reduce environmental degradation related to inadequate solid waste management through (a) improved waste collection which would lessen the quantity of uncollected waste; (b) improved collection methods, landfill design and management practices which would separate municipal wastes from medical wastes and provide for the separate, and proper disposal of each, as well as prevent leachate and other emissions from contaminating the environment; and (c) closure of illegal dumps which will eliminate the possibility of future contamination and health hazards.

An updated Integrated Safeguards Data Sheet has been approved by ECSSD and submitted to the INFO shop.

The Utility in each region included in the project is responsible for managing a regional site. The Utility managing the regional site is also the borrower of the credit and responsible for debt service. A Regional Board has been established in each region composed of representatives from the Cantonal Ministry (applicable in the Federation) and participating municipalities. The Charter of the Regional Boards has been drafted to negotiate a binding agreement between participating municipalities sharing a regional landfill site. The exact nature of the Charter varies among local circumstances and legal systems, but at a minimum, each specifies: the composition and duties of the Board of Directors; voting mechanism for joint decision making; and the cost sharing agreement and payment mechanism for tipping fee and forms of compensation for the landfill host community.

II. BACKGROUND AND RATIONALE FOR ADDITIONAL FINANCING

Background

Priority for solid waste. The Government of BiH recognizes the need to significantly strengthen BiH's capacity to safely manage its solid wastes and has identified this as a priority in its Economic Development Strategy Global Framework (EDSGF). The EDSGF is the Bosnian-owned strategy that replaced the donor-led Priority Reconstruction and Recovery Programs for Policy and Development Assistance. The EDSGF states that solid waste sites have to be restricted to a relatively small number due to the limited available resources and that, in most cases, a regional site should be used by several adjacent urban and associated rural areas.

Nationwide Solid Waste Management Strategy. The European Union (EU) funded preparation of a Nationwide Solid Waste Management Strategy in BiH that was completed in August 2000. The Strategy was the first think piece on solid waste after the war. It recommends a wide range of technical, institutional and financial upgrading measures over the next 15-20 years. The key part of the Strategy centers
on the management of household and similar wastes. It is based on the establishment of multi-municipal districts covering a minimum of 200,000 persons each, which would be responsible for the operation of regional waste transfer, treatment, and disposal facilities. Waste collection responsibility would remain with individual municipal Communal Services Departments, with collection operations carried out under service contracts with Communal Enterprises or private operators. In the short- and medium-term, the strategy emphasizes the goals of universal collection coverage, the introduction of regional sanitary landfills, and the closure and rehabilitation of open dumps. In the long run, it is believed that less populated regions would also join and waste would be transported to fewer but larger landfills. Recycling, composting, waste-to-energy options and introduction of clinical waste incineration are also contemplated. However, the Government recognizes that the integration of these components into the BiH waste management system will require at least 10 years or more and needs to build upon much-strengthened waste collection and disposal capacities.

The Government is hampered by the limited funding available to the sector. Thus, the Government intends to proceed with a priority first phase (2001-2008), a second phase (2008-2013) and a long-term plan (2013-2018). The Government asked the World Bank to assist with the first phase focusing on landfill rehabilitation; safe methods of disposal; public awareness; training of sector staff; and extending waste collection to those areas that are not currently serviced. The original Solid Waste Management project is assisting the Government with the first phase.

**Multi-municipal (regional) landfills.** The Government is establishing legal multi-municipal disposal districts where a single existing landfill site can be rehabilitated and used for disposal of the waste generated by several municipalities. The number of sites should be consolidated to minimize investments and operating expenses for landfills and waste disposal management. In addition, because small municipalities generate limited quantities of waste, it would be uneconomical for individual municipalities to operate their own landfills. With the possible exception of Sarajevo and Banja Luka, it is apparent that few, if any, municipalities in BiH generate enough waste to develop and operate their own independent sanitary landfills in a cost-effective and safe manner. The multi-municipal concept involving one site for several urban and associated rural areas is seen as a viable approach to the current solid waste management problem, since shared waste treatment and disposal sites are known to result in significant economies of scale.

**Cost recovery.** Almost all of the waste services fees are currently collected by the Communal Enterprises, but the fees are set by the municipal assembly and vary considerably across municipalities. In most municipalities, all communal services (waste management, water supply, street cleaning, and so forth), are covered by one invoice to households. In Sarajevo, Mostar, Tesanj, Banja Luka and a few other major cities, municipal services are provided by a single Utility and these large cities have high bill collection rates for waste collection and disposal, but in many other municipalities these services are not financially viable. In the majority of the
municipalities, there is no legally binding provision to pay. Even the cities with higher collection rates, the fees are generally set too low to finance all waste management operations.

*Wild dumpsites.* Numerous illegal dumpsites can be found in each of the municipalities, many of them dating from the war. These wild dumpsites contain various household, industrial, and hazardous clinical wastes and even animal carcasses. The clean-up and closure of these wild dumps, which is a priority, will generate supplementary waste that will also need to be properly removed and disposed of in the future. Furthermore, it will not be possible to close all illegal dumpsites until an alternative is provided to receive waste on a daily basis – in this case, a regional sanitary landfill.

*Current institutional arrangements.* In the Federation, the Ministry of Urban Planning and Environment is responsible for waste management policy and legislation while other Ministries also play a role: Ministry of Agriculture, Water Utility and Forestry for wastewater discharge; Ministry of Health for clinical waste management; and the Ministry for Energy, Mining & Industry for industrial waste management. The organization is similar at the Cantonal level. The Cantonal Ministries are largely responsible for policy and legislation in their respective fields. Within the municipalities, the Communal Enterprises, which come under the Communal Services Department, are usually responsible for waste management as well as collection of fees from customers. In the RS, the Ministry of Urban Housing, Civil Engineering and Environment is responsible for waste management policy and legislation. There is no Canton structure but the organization of services in the municipalities closely resembles that of the Federation.

**Rational for Additional Financing**

Additional bilateral funding from numerous bilaterals and donor agencies has been sought since 2002. Even though donors are very supportive of the Bank’s work in the solid waste sector and have provided technical assistance, there is limited interest to allocate resources for investments. Options such as not following up with the additional work were considered, but given the financing gap and repeated and urgent requests by both Entity Ministries of Environment and local Governments, this is not desirable. In addition, the Bank would lose the momentum gained by the ongoing regional and Entity cooperation.

*Project Development Objectives.* The Project Development objectives are to (1) increase the quality, availability and financial sustainability of solid-waste services in participating areas; (2) increase administrative and technical capacity for solid waste management at the local and Entity level; (3) improve the cost recovery mechanism of the sector to encourage private sector involvement; and (4) correct environmental problems and reduce health hazards caused by inadequate waste collection and disposal systems.
The institutional component related to the establishment of the regional landfills is progressing well. The Inter-Municipal Utilities that manage and operate the project landfill sites have each formed an Inter-Municipal Board. The role of the Inter-Municipal Board is well developed in all of the sites. The Inter-Municipal Boards are responsible for ensuring that the utility is capable of the following: contracting, monitoring and supervising efficient and effective operations; achieving self-financing; regulating uncontrolled dumping by others within its respective area of operation; and meeting all environmental standards established for waste management operations by Entity and/or Cantonal environmental authorities. The local authorities in each region are managing and running the Inter-Municipal Boards in an organized and well managed way.

The Solid Waste Management Project is performing satisfactorily and is one of the few core solid waste projects in the Bank. It is meeting its development objectives and remains consistent with the Country Assistance Strategy of November 2004. The additional financing would allocate approximately US$1.6 million to cover financing gap for each region. This amount is relatively small and, as a result, using additional financing is considered the most appropriate tool.

III. PROPOSED CHANGES:

The additional financing does not propose any changes from the objectives of the original Solid Waste Management Project. The original project was approved by the Board on June 20, 2002 and became effective on October 31, 2002. It has a current closing date of February 29, 2008. The implementation period for the additional financing is expected to be about 4 years, leading to a closing date of November 30, 2009.

Implementation Arrangements. The implementation arrangements of the additional financing will be the same as for the original credit. The additional financing will be implemented from 2005-2009 under the overall responsibility of the Ministry of Physical Planning and Environment in the Federation and the Ministry of Urban Housing, Civil Engineering and Environment. A Project Management Unit (PMU) has been established in the Federation for implementation, including procurement and financial management aspects, of the proposed project. The PMU has been appropriately staffed by qualified personnel. The PMU consists of a PMU Head, Procurement Manager, Procurement Officer, Financial Manager and Accountant. Project Implementing Teams (PITs) are located in the Solid Waste Utilities managing the landfill site. The PITs consist of a Procurement Officer and Accountant besides other technical staff. The PMU has overall responsibility for implementation, including procurement and financial management actions but works closely with the PITs.

On-lending arrangements. The Federation Government, through the Ministry of Finance would on-lend the Credit to the Utilities in the Federation. The RS
Government, through the Ministry of Finance, would on-lend the credit to the Utilities in RS. The Government would receive the modified IDA terms with a 10 year grace period, a final maturity of 20 years, a service charge of 0.75%, and a commitment fee of 0.50%.

**Fund Flow.** The financial flows will comprise mainly of: (a) the Bank, via a single Special Account (in two sub-accounts), which will be replenished on the basis of Statement of Expenditures (SOEs) or by direct payment on the basis of direct-payment withdrawal applications; or (b) the Government, via the Treasuries at the Ministries of Finance in the Federation of BiH and RS on the requests made by the PMU via the Ministry of Physical Planning and Environment in the Federation and the Ministry of Urban Housing, Civil Engineering and Environment in the Republika Srpska. It has been agreed that from the Additional Credit proceeds, SDR 3,644,000 and SDR 1,656,000 will be allocated to the Federation and RS respectively.

**Disbursements.** Disbursements of the additional financing will occur pursuant to the same arrangements as for the original credit. Disbursements are based on traditional disbursement methods (i.e., from the Special Account with reimbursements made based on SOEs and full documentation, and direct payments from the Credit Account). The Government has established, maintained and operated, under terms and conditions acceptable to the Bank, one separate Special Account denominated in Euro for the PMU.
**Project Costs**

### Additional Financing Project Cost

<table>
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<tr>
<th>Component</th>
<th>Local Financing (US$M)</th>
<th>Bank-financing (US$M)</th>
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<tr>
<td>A. Waste Management Component</td>
<td>0.47</td>
<td>6.7</td>
</tr>
<tr>
<td>Rehabilitation of landfill sites</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Closure of wild dumps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Collection infrastructure and support equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Transfer stations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. Engineering Services/Technical Assistance</td>
<td>0.48</td>
<td>1.00</td>
</tr>
<tr>
<td>- Engineering Services for design and construction supervision</td>
<td></td>
<td></td>
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<tr>
<td>- Technical Assistance for waste management and landfill operations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Project Management Unit (PMU)</td>
<td>0.15</td>
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<tr>
<td>D. Operating Costs</td>
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<td><strong>Total Project Costs</strong></td>
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<tr>
<td><strong>Total Financing Required</strong></td>
<td><strong>1.30</strong></td>
<td><strong>8.00</strong></td>
</tr>
</tbody>
</table>

### IV. CONSISTENCY WITH THE CAS

The Country Assistance Strategy for BiH (Report No: 29196 – BA) stresses the importance of protecting the environment and developing and maintaining infrastructure. The challenges are cited to improving environmental degradation and the need for pollution control. Runoff and leachate infiltration from dumpsites are potential hazards for the groundwater aquifers in some areas of BiH that provide the main source of water supply. The most serious problems caused by such dumpsites include the deterioration in groundwater quality, destruction of vegetative cover and the proliferation of insects and rodents that are disease vectors. These serious public health and environmental problems are worsened by weak institutional and enforcement capacity. Furthermore, odors and unsightliness discourage development in the immediate vicinity of these dumps and end up being harmful to overall economic development. As the post-conflict phase is gradually fading and with improved living standards, the importance and protection of the environment has become a high priority to the citizens of BiH.
V. ECONOMIC ANALYSIS OF COST OVERRUN OR FINANCING GAP

Similar to appraisal, customary economic cost-benefit analysis was attempted on the basis of annual flows of economic benefits and costs, derived from the financial revenue and costs contained in the current financial cash flow analysis. Even though the data has improved since the preparation of the original project, the data does not permit a rigorous cost-benefit analysis. The method of charging for waste collection is on the basis of number of persons benefiting or on the basis of area of the properties served. Such a billing method creates difficulties for the economic-cost benefit analysis because consumers cannot signal their incremental satisfaction with the incremental amounts of waste collected and the more sanitary disposal in landfills on which the project justification rests. The relative novelty of the project type in Bosnia-Herzegovina means that cost estimates are fragmentary and reduce the reliability of projections.

Still, cost effectiveness analysis of the investments under the project was feasible. It assumes that the respective project beneficiary populations require sanitary collection and disposal of the waste generated in order to safeguard their health and the environment. It then analyzes per capita investments to confirm that investments are efficiently sized to meet the demand for solid waste collection and disposal services. The per capita investment costs for the project cities range from $14.85 - $33.00.

The project has been designed to meet demand at the least possible cost. The above per capita investment costs should be weighed against the benefits of reduction in environmental damage, public health hazard, and public awareness on the need to improve the environment. Some of these are captured through the solid waste management fees that consumers pay although consumers are likely to underestimate the full environmental and health benefits. In addition, intangible esthetic benefits arise from having cleaner cities and surrounding areas, through the reduction of uncontrolled dumping.

VI. EXPECTED OUTCOMES

The project outcome will remain the same as the original project. The expected outcomes would be: (a) establishment of multi-municipal waste management districts, regional landfill sites, and transfer stations; reduction in the number of wild dumpsites; (b) strengthening of appropriate institutions to manage solid waste services, preparation of Business plans for future development of waste disposal sites, education and public awareness campaigns; (c) establishment of a cost-recovery system and an agreed program for its gradual improvement; billing and collection statistics; and (d) private sector involvement through service contracts, recycling and selected other joint ventures with domestic or foreign private companies.
VII. BENEFITS AND RISKS

<table>
<thead>
<tr>
<th>Risk From Outputs to Objective</th>
<th>Risk Rating</th>
<th>Risk Mitigation Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of will of some municipalities to participate in a multi-municipal landfill site in a cooperative manner.</td>
<td>N</td>
<td>Demand to participate in the project has been overwhelming. There is a long wait list for regions that want to be included in the project but due to lack of funds, this is not possible at the current time.</td>
</tr>
<tr>
<td>Public's potential unwillingness to pay for services.</td>
<td>S</td>
<td>Continued implementation of communication program to ensure stakeholder involvement and local ownership in project.</td>
</tr>
<tr>
<td>Lack of enforcement and continued wild dumping.</td>
<td>M</td>
<td>High penalties and public awareness activities.</td>
</tr>
<tr>
<td>Limited institutional capacity.</td>
<td>S</td>
<td>Continued extensive training in coordination with donors to further strengthen local capacity.</td>
</tr>
<tr>
<td>Financial viability and sustainability of the Utilities</td>
<td>S</td>
<td>Introduction of tipping fees and regular monitoring of the Utilities, and where appropriate requesting Utilities to prepare acceptable financial management action plans.</td>
</tr>
</tbody>
</table>

**Overall Risk Rating**

M

Risk Rating - H (High Risk), S (Substantial Risk), M (Modest Risk), N (Negligible or Low Risk)

VIII. EFFECTIVENESS CONDITIONS FOR ADDITIONAL FINANCING

Effectiveness Conditions

(a) The amended Project Agreement has been executed on behalf of IDA and both Entities, the Federation and the RS on terms and conditions satisfactory to IDA.

(b) The amended Subsidiary Finance Agreement has been executed on behalf of the Borrower, and both Entities, the Federation and the RS on terms and conditions satisfactory to IDA.

Financial Covenants

(a) Ensure that the Utilities do not incur any debt unless a reasonable forecast of the Utilities revenues and expenditures shows that the estimated net revenue of the Utilities for each fiscal year during the term of the debt to be incurred shall be at least
1.3 times the estimated debt service requirements of the Utilities in such year on all
debt of the Utility, including the debt to be incurred.

(b) Ensure that the records, accounts and financial statements of the Utilities for
each fiscal year are audited, in accordance with appropriate auditing principles
consistently applied, by independent auditor's satisfactory to the Borrower and the
Bank, and furnish to the Borrower not later than six (6) months after the end of such
year certified copies of the financial statements for such year so audited and the report
of such audit by the auditors of such scope and such detail as the Borrower and the
Bank shall have reasonably requested.

**Environmental Covenant**

Environmental Management Plan (EMP) means the plan, satisfactory to the Bank,
prepared and adopted by the Recipient, describing the environmental mitigation,
monitoring and institutional measures under the Project.
BOSNIA AND HERZEGOVINA
SOLID WASTE MANAGEMENT PROJECT
PROPOSED ADDITIONAL FINANCING

Annex 1: Project Description Summary of the Original Solid Waste Management Project

<table>
<thead>
<tr>
<th>Component</th>
<th>Sector</th>
<th>Indicative Costs (US$M)</th>
<th>% of Total</th>
<th>Bank-financing (US$M)</th>
<th>% of Bank-financing</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Waste Management</td>
<td></td>
<td>15.71</td>
<td>74.8</td>
<td>15.09</td>
<td>83.8</td>
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<tr>
<td>Rehabilitation of landfill sites</td>
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<tr>
<td>- Closure of wild dumps;</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>- Collection infrastructure and support equipment</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>- Transfer stations</td>
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<tr>
<td>B. Institutional Strengthening</td>
<td></td>
<td>1.07</td>
<td>5.1</td>
<td>0.61</td>
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<tr>
<td>- Public Communication program and environmental monitoring</td>
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<td></td>
<td></td>
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<tr>
<td>- Medium-term Business plan</td>
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<tr>
<td>C. Engineering Services/Technical Assistance</td>
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<td>2.78</td>
<td>13.2</td>
<td>1.90</td>
<td>10.6</td>
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<tr>
<td>- Engineering Services for design and construction supervision</td>
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<tr>
<td>- Technical Assistance for waste management and landfill operations</td>
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<td>D. Project Management Unit (PMU)</td>
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<td>E. Operating Costs</td>
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<td>4.5</td>
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</tr>
</tbody>
</table>

Total Project Costs: 21.00 100.0 18.00 100.0

Total Financing Required: 21.00 100.0 18.00 100.0