

ENVIRONMENTAL MANAGEMENT PROJECT

(TC-95-04-39-2)

EXECUTIVE SUMMARY

REQUESTER: Republic of Guyana

EXECUTING AGENCY: Environmental Protection Agency (EPA)

BENEFICIARIES: Environmental Protection Agency (EPA), Guyana Forestry Commission (GFC) and Guyana Geology & Mines Commission (GGMC)

FINANCING:

IDB:	US\$1,500,000 (SF)
Local counterpart funding:	US\$ 150,000
Total:	US\$1,650,000

TERMS:

Execution period:	1.5 years
Disbursement period:	2 years

ENVIRONMENTAL CLASSIFICATION: The Environmental Management Committee, at its meeting of August 29, 1995, classified this as a Category I operation.

OBJECTIVES: The project will: (i) strengthen the technical, managerial and organizational capabilities of the newly established EPA; (ii) develop the country's legal and regulatory framework in the environment and natural resource management areas; and (iii) improve the environmental management and monitoring capabilities of two selected sectoral agencies.

DESCRIPTION: EPA is not fully operational. The establishment of the Agency is being coordinated by the Environmental Unit of the Office of the President, with support from an inter-agency committee and a Project Preparation Unit (PPU). Local and international consultants working in the Environmental Unit and in the PPU who show satisfactory performance during the preparation period, could remain as part of EPA after project initiation. No permanent staff positions have been filled under the project, although advertisement for the Executive and Administrative Director posts is underway.

In order to strengthen the EPA, the Guyana Forestry Commission (GFC), and the Guyana Geology and Mines Commission (GGMC), the project will finance basic technical and administrative staff (counterpart funding), technical assistance, basic equipment, training, operation costs, materials, and recurrent costs of the Agency for the eighteen (18) months of

the project period. With project support, EPA will devise and implement a plan for long-term financing of its recurrent and operation costs.

The program will finance the development of environmental regulations to avoid undesirable environmental impacts and to foster sustainable environmental and resource management, in keeping with the spirit of the Environmental Protection Act. The project will finance the implementation of the Environmental Quality Control (EQC) system, the Environmental Monitoring and Enforcement (EME) program, and an environmental information systems component.

BENEFITS:

The project will contribute to overcome some of the major obstacles to Guyana's sustained environmental management, by making operative the government's structures responsible for those tasks. Bringing Guyana into the mainstream of environmental management practices is considered a high priority in view of the imminent pressures resulting from the implementation of current economic growth policy, as well as from existing social constraints that impact upon its valuable though fragile natural resource base. Support in this area is particularly important for this low-income country, so highly dependent upon its natural resource base. Additionally, the project would facilitate the development of an advanced and stable set of guidelines, fees and environmental procedures to guide the decisions of potential domestic and foreign investors.

RISKS:

The principal and widely acknowledged risk faced by this operation is the lack of adequately trained personnel to undertake all the tasks required under the project. The project has adopted a recruitment strategy designed to accommodate specialized expatriate technical assistance, giving preference to Guyanese nationals willing to return to Guyana and providing sufficient economic incentives and competitive fees.

This staffing limitation has created the need to budget a relatively high fee structure, which brings the risk of creating an excessive payroll burden for the government after project completion. While government input is expected to increase significantly after the start-up period, it is also foreseen that other sources of external support would be needed and available. EPA would produce a long-term financial plan which would include the adoption of a gradual phasing out of external support to

permit the gradual transfer of responsibility to the government; this strategy did not seem practicable for the present operation due to its very short duration. It is assumed that the current high governmental support to the objectives of environmental management will continue and grow in the future.

**THE BANK'S
COUNTRY STRATEGY:**

The Bank's strategy for Guyana, set out in the Country Programming Paper and approved by the Board of Executive Directors in August 1995, established the following key objectives: (i) attainment and maintenance of a sound macroeconomic environment, requiring the reduction of the external debt burden and improvement of public sector efficiency; (ii) improvement of health and education systems; (iii) rehabilitation of economic infrastructure to restore productive capacity and efficiency; and (iv) establishment of systems to safeguard the integrity of the country's natural resource endowment. Improvement in all these areas is a necessary condition for sustained development.

**SPECIAL
CONTRACTUAL
CONDITIONS:**

The GOGY and the Bank have agreed on placing, as conditions prior to approval: (i) notification of the structuring and initiation of operations of EPA's Board of Directors, under the characteristics stated in the EPA Act, placing special emphasis on civil society representation and amerindian interests; (ii) presentation of a copy of the ministerial Order of Appointment which brings the EPA Act into operation; and (iii) presentation of a complete list of EPA staff and long-term technical assistance positions, including clear lines of authority.

The following conditions for first disbursement were agreed: (i) contracting and assumption of duty of EPA's Executive Director and Administrative Director, through international competition and based upon terms of reference and qualifications previously approved by the Bank; (ii) appointment of the members of the Environmental Appeals Tribunal, members of the Environmental Assessment Board, and of the Trustees for the Environmental Trust Fund, all according to the provisions of the EPA Act; (iii) completion of the appointment of the institutions represented in the Inter-Agency Technical Group; (iv) signature of Memoranda of Understanding between EPA and participating agencies, including detail of the latter's representatives to the Inter-Agency Technical Group; and (vi) evidence of inclusion of counterpart funding for the first year of EPA operation within the national budget.

I. BACKGROUND

A. Guyana's environmental context

- 1.1 Guyana (Cooperative Republic of Guyana) covers an area of 215,083 km². The climate is tropical, with two wet and two dry seasons. The annual rainfall averages between 2,300 mm (90.3 in.) per year in the coast and 3,900 mm (152.2 in.) in the interior. There is little variation in daily temperature and the relative humidity is always high.
- 1.2 The coast line is about 430 km (270 miles) long. The narrow Atlantic coastal plain extends up to 16 km inland and includes agricultural land protected by a network of artificial sea walls and drainage canals. The coastal plains were previously occupied by forests which have been completely harvested. The area lies now below sea level; over 5,000 km² (500,000 ha.) are cultivated mainly with rice and sugar cane. Mangroves occupy about 800 km² (80,000 ha.) and are threatened by exploitation by bark and fuelwood gatherers; mangrove cutting has caused erosion of the shoreline, destruction of sea defenses, and loss of marine habitat and shore wildlife and fish.
- 1.3 About 205,000 km² (95%) of the total territory of Guyana are covered with forest and woodland vegetation. Most of this vegetated surface is high tropical forest (170,000 km² or) relatively well preserved, starting some 65 km inland. The remaining 35,000 km² are savannas.
- 1.4 Water resources are abundant, both in surface and sub-surface. The hydrographic network is dense and well distributed throughout the country. The main river systems flow from the south and empty into the Atlantic; their southerly upland reaches have numerous rapids and waterfalls; they are navigable in their lower courses. The forested watersheds supply the conservancies that feed irrigated agriculture.
- 1.5 Alluvial soils in the costal area are the most fertile, although, due to high clay contents, are highly impermeable and thus susceptible to floods. Elsewhere the soil is generally poor and the topography and rainfall patterns adverse to agriculture. The forested lowland region --generally below 500 feet in elevation, which is the largest topographical unit, has extremely fragile soils with textures that range from white sand to silty clay.
- 1.6 Native wildlife is varied and abundant and includes many endemic species. Data on species composition and distribution is incomplete. The Center for the Study of Biological Diversity (CSBD) is in the process of developing a data bank on biodiversity; completion of the data bank, however, is a long term plan.

B. Population and its relation to the natural resource base

- 1.7 Guyana has a population of approximately 750,000 which is 50% Indo-Guyanese, 36% Afro-Guyanese, 7% Amerindian, and 7% of other origin. The major urban centers are Georgetown (capital city), Linden, New Amsterdam and Corriverton.
- 1.8 Nine-tenths of the population live on the coastal area. Estimates of population density in the Georgetown region range from 360 to 700 persons per km². By contrast, the density in the country as a whole is only 4 persons per km². Thus, the population is concentrated on a small section of the country that harbors the traditional commercial activities.
- 1.9 The population inhabiting the coastal area is devoted principally to commercial and subsistence agriculture. Major crops are sugarcane and rice, and to a lesser extent coconut, bananas, citrus and vegetables. Subsistence farming centers on cassava and corn (maize).
- 1.10 The Amerindian population has been estimated to number approximately 50,000; they live in about 150 settlements belonging to nine tribes, scattered throughout the hinterland, mainly in the savannah, riverain and forest areas. The Amerindians Act reserves lands totaling about 14,000 km².
- 1.11 Per capita GDP has dropped from US\$690 in 1980 to US\$612 in 1994, and the proportion of the population living in poverty has increased during the period from 27% to 43%. The highest incidence of poverty is in the rural areas. The proportion of poor is highest among the Amerindians compared with the other ethnic groups; 85% of Amerindian population falls below the poverty line.

C. Economic structure

- 1.12 Guyana has a developing market economy in which both the public and private sectors participate. The former, however, remains heavily dominant; the State keeps control of most of the country's capital and natural assets.
- 1.13 The main economic activities are mining, agriculture and forestry; manufacture industries are only small and medium scale. Mining concentrates in gold and bauxite exploitation, which have been the traditional sources of foreign exchange; the bauxite sector, however, has recently suffered major setbacks. Agriculture accounts for about one-third of the gross domestic product (GDP) and employs about one-fifth of the work force. Timber wood products and forestry concessions are a still small but promising source of revenue for the country. Capital and consumer goods are largely imported.
- 1.14 The vast hydroelectric potential of Guyana --some sixty potential sites have been identified-- remains untapped. Current energy

supply comes from thermo-electric plants. As it concerns infrastructure, most of the country's roads are unpaved, and Guyana's limited miles of railway are operated by the government for the mining industry.

D. Economic development and environmental policy

- 1.15 In the 1980's Guyana pursued a model of economic development characterized by heavy state intervention which caused a period of steady economic decline. Large public sector deficits, high inflation and a growing reliance on foreign borrowing brought Guyana's economy on the verge of disaster with an external debt equal to 400% of the GDP, a negative growth rate, and inflation over 70%.
- 1.16 In 1988 the Government of Guyana undertook a structural adjustment program, which was directed towards liberalizing the domestic and external sectors of economy, streamlining the public sector, privatizing a large group of public enterprises.
- 1.17 By 1994, Guyana had removed most of the price distortions, exchange rate controls, and import restrictions; public sector expenditures had been controlled and the fiscal deficit reduced; a privatization program had been initiated for a large group of public enterprises. The combined effect of the implemented measures contributed positively to the resurgence of economic activities in the country. The Guyanese economy is about to complete its sixth consecutive year of positive economic growth, with an expected rate of 7.5% in 1996. Inflation is expected to fall from 8.1% in 1995 to 6.7% in 1996.
- 1.18 Under the current liquidity constraints associated to its external debt burden, the Government is committed to enlarge the country's exports over the next few years, based upon growth in agriculture, forestry and mining. Development of those resources has been limited so far due to difficulty of access, unfavorable investment conditions, and lack of capital. These conditions are changing, however, making the prospect of growth in these areas a worrisome proposition in the absence of adequate environmental policy and enforcement capabilities.
- 1.19 Concomitant with these economic developments, the Parliament in 1994 approved the National Environmental Action Plan (NEAP), which identified the major environmental problems in the country and formulated appropriate policies to address the causes and effects of these problems. These environmental management functions were initially performed by the Environmental Division of the Guyana Agency for Health Sciences, Education, Environment and Food Policy (GAHEF), and were subsequently assumed by the Environmental Unit of the Office of the President.
- 1.20 In May 1996 the Parliament also approved the Environmental Protection Act, which established the Environmental Protection

Agency (EPA), described in detail in Chapter III. The Act also introduces Environmental Impact Assessment (EIA) as the basis of a permit system designed to prevent undesirable environmental impacts from development projects. Yet, the country lacks the required legal, technical, organizational and information base to support and make effective the functions of the EPA. It also lacks sufficient awareness and education among its population to facilitate this task by reducing current pressures upon the country's fragile resource base.

E. Request for technical assistance and involvement of international financing agencies

- 1.21 Establishment and operation of the EPA is a goal of the Government of Guyana and is actively supported by the people of Guyana and the entire international community associated with Guyana. The country does not have a comprehensive body of environmental regulations to guide its investment decisions, thus the need to establish an effective EPA; concomitantly, the country lacks sufficient environmental safeguards to ensure sustainable management of its important forest and mineral resources, thus the need to strengthen the Guyana Forestry Commission (GFC) and the Guyana Geology & Mines Commission (GGMC).
- 1.22 The contents and orientation of this operation have been extensively discussed with representatives from the bi-lateral and multi-lateral development agencies in Georgetown, as well as with members of the non-governmental community. In fact, the World Bank participated actively in the project preparation phase; their potential contribution has been postponed for future negotiation.
- 1.23 There is a general consensus among government agencies, donors/lenders and the private sector on the need for an effective environmental regulatory body. There is also agreement on keeping it small, avoiding excessive budgetary commitments, and designing procedures to avoid it becoming a bottleneck in the decision-making process in Guyana. These considerations have been taken into account in the design of this operation.
- 1.24 In 1995 the GOGY requested the Bank's assistance to establish and begin operating EPA. It is expected that the EPA would attract and secure additional international funding for subsequent phases.

II. OBJECTIVES

- 2.1 The overall project objective is to improve environmental management systems in Guyana. This would be achieved by: (i) providing initial financial support to the Environmental Protection Agency (EPA); (ii) improving the natural resource management and environmental monitoring capacity of the agencies

responsible for the forestry and mining sectors; and (iii) streamlining and enhancing the legal and regulatory framework for environmental management. Overall, the project would assist the Government of Guyana (GOGY) in implementing the Environmental Protection Act (1996) and the National Environmental Action Plan (1994), as well as in promoting public participation in environmental management.

III. PROJECT DESCRIPTION

- 3.1 The project is directed towards improving the public sector's capabilities in environmental policy, planning, control and enforcement. Specifically, the project intends to: (i) strengthen the technical, managerial, organizational and financial capabilities of the newly established EPA; (ii) contribute to develop the country's legal and regulatory framework in the environment and natural resource management areas; and (iii) improve the environmental management, monitoring and enforcement capabilities of two selected sectoral agencies.
- 3.2 A table containing the logical framework for the project has been prepared (Annex III-1) and will be an instrument in the preparation of project workplans.
 - A. Participating institutions: EPA, Guyana Forestry Commission (GFC) and Guyana Geology & Mines Commission (GGMC)
 1. Environmental Protection Agency (EPA)
- 3.3 EPA's mandate and its functions are set out in the Environmental Protection Act, signed by the President on June 5th, 1996. The Act makes EPA responsible for effective management of the natural environment and the protection and sustainable use of the country's natural resources. EPA must also promote public participation in the process of integrating environmental concerns in planning for development on a sustainable basis. The Agency must also coordinate the environmental management activities of people, organizations and agencies. Moreover, EPA is responsible for establishing, monitoring and enforcing environmental regulations.
- 3.4 The EPA is a body corporate governed by a Board of Directors. The Board consists of between seven and eleven persons, most of them knowledgeable and with experience in environmental matters and some with experience in corporate management. A participatory Board has been pointed out as a fundamental condition for firm international support for EPA. Board members are appointed by the Minister. This Board will oversee the operations of the Agency; approve environmental policies; take to the Minister laws or regulations proposed by the Agency's administration; and in general control the Agency's budget, administration, workplan and programs. The Board

will meet monthly. An Appeals Tribunal will be attached to the President's office, and independent of the EPA proper.

- 3.5 The internal structure of the EPA has been agreed upon in principle (Annex III-2). Its growth has been planned in two stages, an initial start-up phase of eighteen (18) months, funded mainly through the present operation and the central government budget; and a subsequent phase for which EPA will have to secure internal resources additional to central budget, plus other external contributions. EPA will develop a plan for long-term financing of its recurrent costs, specifying the Government and others' contributions, and the phasing out of both by growing self-generated income; cost recovery mechanisms would be given highest priority. Both in the short and long term, the Agency will: (i) remain modest in size; (ii) concentrate its efforts in developing regulations and implementing an environmental permit system; (iii) rely on the sectoral agencies to carry out a significant part of day-to-day environmental monitoring and management activities.

2. Guyana Forestry Commission (GFC)

- 3.6 The GFC was established by the Guyana Forestry Commission Act (GFC Act 20 of 1979). Its main objective is to manage Guyana's forests so as to derive maximum benefits, pursuing optimum production and utilization of those resources for local and foreign markets. The Commission is self financing and heavily dependent upon the state of affairs of the forestry industry, as it derives its income from royalties, license fees, export commissions, and sales and services.
- 3.7 The GFC has established an Environmental Unit. It also has a network of forest officers, largely stationed in local offices outside of Georgetown, or on concessions; activities of these officers are currently more focused on monitoring wood extracted from concessions for purposes of royalty assessment.
- 3.8 GFC is currently benefiting from the British Overseas Development Agency (ODA) Support Project which involves a large institutional strengthening program for the GFC and the forestry sector in general. However, the program does not include strengthening of the Agency's environmental management capacity; thus, the inputs prescribed as part of this operation are additional to those of ODA.

3. Guyana Geology & Mines Commission (GGMC)

- 3.9 The GGMC was established by an act of Parliament in 1979. The GGMC has the responsibility to ensure that Government's property rights over the subsoil and its control of mining of metals, minerals and precious stones. GGMC is in charge of promoting interest in mining and mineral exploration; it also advises on the economical exploitation of these resources. Petroleum exploration has been

recently included within GGMC's scope. The GGMC is largely self-financing, registering sustained annual surpluses.

- 3.10 The GGMC currently has very limited environmental management capacity. Approximately 25 mines officers carry out inspection and enforcement, focusing primarily on small and medium scale operations. Inspections emphasize compliance with mining regulations and mining agreements, but also cover basic occupational health and safety.

B. Scope and activities

- 3.11 The project will be implemented under three components: (i) strengthening the EPA; (ii) development of environmental regulations and operational instruments; (iii) strengthening GFC and GGMC.

1. Strengthening the EPA

- 3.12 EPA is not fully operational. The establishment of the Agency is being coordinated by the Environmental Unit of the Office of the President, with support from an inter-agency committee and a Project Preparation Unit (PPU). Local and international consultants working in the Environmental Unit and in the PPU who show satisfactory performance during the preparation period, could remain as part of EPA after project initiation. No permanent staff positions have been filled under the project, although advertisement for the Executive and Administrative Director posts is underway.
- 3.13 In order to strengthen the EPA, the project will finance basic technical and administrative staff, technical assistance, basic equipment, training, operation costs, materials, and recurrent costs of the Agency for the eighteen (18) months of the project period (Annex III-3 contains the analytical design for EPA structure).
- 3.14 The initial structure (Annex III-2) will consist of an Executive office, three Divisions (Operations, Administration, and Education, Training & Information), an office of Legal Support, and two supporting bodies (Inter-Agency Technical Group and the EA Board). (Annex III-4 contains the organizational chart depicting agreed EPA long-term structure).
- 3.15 For the initial period, the Agency will have a small but strong staff allocation. Evident scarcity of adequately trained Guyanese staff to occupy the posts that would open in EPA, the single most important constraint affecting this and other development programs, has lead to the adoption of a combined recruitment strategy:
- a. A core of Guyanese personnel would include: two technical level positions in the Operations Division, two administrative

officers, and support staff; these positions would be covered under counterpart funding (total of 5 professionals).

- b. The core group would be supported by a group of international level experts (preferably Guyanese, but could be expatriates) hired as long term technical assistants with project funding, and selected via international competition to work full time for the duration of the project. The Executive Director position is included under this category, as well as the three Division Directors (Operations, Administration and Education/Awareness/ Training), and the Legal Adviser (total of 5 professionals).
 - c. Additionally, 3 highly specialized international advisors would be made available under project funding for a total of 18 expert/months, to give advise on financial strategies, information management, and training.
- 3.16 The Executive Director (ED) would be preferably, but not necessarily, Guyanese, and will be selected via international competition. Candidates with graduate training in environmental science or associated fields, but with extensive management experience would qualify for this crucial position.
- 3.17 A project-specific enquiry found that mid-level technical positions could be filled with recent graduates of the University of Guyana. These young professionals would constitute the agency's core, with direct supervision by international level staff. A preliminary collection of Curricula Vita for potential candidates for the Executive Director position has rendered encouraging results. Annex III-5 contains Terms of Reference and qualifications for key personnel.
- 3.18 EPA core staff salaries will be set at such a level as to attract well qualified, competent professionals; yet, they will be in keeping with the potential ability of the GOGY to take over the payroll after project completion 1 (See table of salaries, Annex III-6). In spite of the effort made to raise salary levels above regular public sector figures taking advantage of a special-regime conceded to EPA, expatriates may find them unattractive. Thus, the project would cover subsistence costs of recruited expatriates, which together with the prospect of long-term involvement with EPA, would improve the competitiveness of these positions in international markets. In fact, the GOGY expects to attract dual-nationality Guyanese, currently living abroad, back to Guyana. Ongoing enquiries recorded during project preparation would seem to warrant sufficient interest from such group.
- 3.19 A preliminary timetable has been developed to cover the eighteen months expected duration of the project (Annex III-7). According to the timetable, first priority would be given to selecting the agency's executive director, and hiring technical staff,

particularly those who would be engaged in the development of environmental regulations, legislation and operational instruments.

- 3.20 Efforts at defining and developing the long-term financial plan for EPA would be initiated immediately after project initiation, and would be principal focus of the international financial advisor. The technical team working in EPA, with the support of consultants, will concentrate their efforts in the implementation of the Environmental Quality Control (EQC) system, and the structuring of the Environmental Monitoring and Enforcement (EME) program. A preliminary conceptualization of these activities has been generated (within Annex III-3); additional discussion and the necessary inter-institutional agreements would be finalized during project execution.
- 3.21 To start implementation of these systems, appropriate inter-agency coordination mechanisms must be developed, as well as procedures to process EIA, permits, monitoring schedules and enforcement means. The EQC system is expected to become operative, at a basic working level, within the first six months of project implementation; the EME system would follow. The remainder of the project duration will be devoted to testing and improving these systems.
- 3.22 Funds from this operation would be devoted as well to provide EPA with some basic capacity in the field of environmental information systems. EPA would be provided with the capability of integrating other larger geographic information systems located in other, specialized institutions. An information systems specialist will be contracted to assess EPA's information needs and comparative advantages in that field; the specialist would advise EPA to select priority data bases to be built within EPA, and/or to be tapped from other agencies, which would define EPA's role as part of local and international information networks. Additionally, the specialist would train local staff in the operation of those information systems.
- 3.23 EPA will structure an environmental outreach program to promote the concepts and objectives of environmental management among different sectors of Guyanese society, coordinating the work of other governmental and non-governmental organizations working in this field. The project will contribute funds and materials to undertake these activities.
- 3.24 The project would cover training in situ, fundamentally through the transference of technical expertise from the international experts contracted as technical assistance, under a well structured and intensive training program to be designed by a training specialist, and implemented with the help of appropriate local education and training institutions. The EPA would also receive some basic equipment (computers, printers, fax) and materials and have basic operation costs covered for the duration of the project.

2. Development of Environmental Regulations and Operational Instruments

- 3.25 The first major activity to be undertaken by EPA would be the development of adequate environmental regulations. The recently passed Environmental Protection Act needs a comprehensive set of regulations, based on appropriate parameters and standards, to be operative. As part of project implementation, it is expected that the EPA would adopt an internationally acknowledged standards system as the basis for its regulatory structure. Hired staff and technical assistance would engage in the generation of environmental regulations required for the forestry and mining sectors, as such have been agreed as the first priority for this purpose.
- 3.26 Regulations developed by EPA would focus on avoidance of undesirable environmental impacts and other aspects of environmentally sustainable natural resource management, in keeping with the spirit of the Environmental Protection Act. EPA's work will not be referred to the economic and technical aspects of the administration of the country's forestry and mining resources, as those are responsibility of the respective sectoral agencies. The procured technical assistance will give special attention to keeping clear boundaries between EPA and the sectors regarding regulation and monitoring activities.
- 3.27 The Agency requires a range of standard operational instruments such as permits, orders, licenses and authorizations, in order to operate administratively in compliance with the Act. The project will provide for the identification and development of such legal forms.

3. Strengthening GFC and GGMC

- 3.28 Strengthening for GFC and GGMC would consist of technical assistance, by means of engaging environmental officers (one per agency) and field inspectors acting as environmental auditors (two per agency), to assist in the development and application of environmental regulations in their respective sectors. These staff would have the support of international experts on EIA and specialized standards.
- 3.29 The work of the environmental officers, inspectors and technical assistance providers would be directed towards establishing the environmental monitoring and enforcement system mentioned before. GFC is currently receiving support from the ODA. The basic division of responsibilities and working arrangements have been discussed during project preparation; final arrangements would be spelled out in working papers to be produced after commencement of project activities.
- 3.30 With Bank support, the environmental unit at GFC would be able to continue and enhance environmental monitoring of forest concessions

as well as develop needed guidelines defining environmentally acceptable practices for forestry operations. The GGMC would have to create a similar unit, and develop the corresponding procedures and guidelines; a first task would be to sort out the numerous recommendations that have been made to the GGMC in order to avoid future pollution events such as the recent Omai gold mine spill.

- 3.31 The project will finance the construction/rehabilitation of field stations, located strategically to serve as shelter and operation centers for GFC and GGMC monitoring activities. Where practical, GFC and GGMC will jointly manage the field stations.
- 3.32 Additionally, the EPA financial advisor would assist GFC and GGMC in developing alternative means to internalize the environmental costs of investments in their respective sectors. Options to re-structure fees and royalties to generate funding for an escrow account, for example, would be analyzed and discussed in coordination with other sector-specific technical assistance efforts currently underway.

C. Organization and execution

- 3.33 The Ministry of Finance would be the borrower, on behalf of the Government of Guyana. EPA would be the executing agency and beneficiary, and within EPA, the Executive Director would be responsible for project management and implementation. EPA would be responsible for the fulfillment of the work plan and the realization of the project objectives. The relationship between EPA and the other two beneficiaries (GFC and GGMC) would be governed by Letters of Agreement, later reinforced with more specific Memoranda of Understanding (MOU).
- 3.34 EPA would establish a project administration unit headed by EPA's Administrative Director, and supported by the Administrative Officer. The project administration unit would administer all project funds, on behalf of the executing agency, and would generate the financial reports detailed in the Reports section of this document.
- 3.35 The Bank's field office in Guyana would conduct disbursements following standard Bank procedures for technical cooperation. A revolving fund would be established, with an initial disbursement equivalent to 10% of the total cost of the operation. Disbursements could be halted if the Bank missions or evaluations find unsatisfactory progress in project implementation against the pre-established targets (Logical Framework --Annex III-1, and Timetable --Annex III-7). If these measures would ever become necessary, the Bank would communicate the matter, in writing, to the executing agency and the borrower.
- 3.36 Government counterpart funding would be principally applied to contracting EPA's local staff. The GOGY will make timely budgetary

allocations to cover these expenses, and the funding would be managed directly by EPA's Administrative Division.

D. Expected results

3.37 Implementation of this project is expected to render the following results during project implementation:

- a. A functioning EPA, with three Divisions, and technical and coordination bodies in force.
- b. A team of highly qualified experts, local and expatriate, would be engaged for the duration of the implementation period; the long-term financial plan would make provisions to retain these experts as permanent staff.
- c. A set of regulations to permit the application of the Environmental Protection Act would be developed, with a corresponding set of norms and parameters, all directed as a priority to the forestry and mining sectors.
- d. A set of regulations, fees and environmental procedures to guide the decisions of potential domestic and foreign investors, who otherwise face discouraging uncertainty in this respect.
- e. A basic Environmental Quality Control (EQC) system would be in place, fostered by the Inter-Agency Technical Group, confirmed by explicit agreements (MOU) signed among participating agencies, and sanctioned by the EIA Board.
- f. A basic Environmental Monitoring and Enforcement (EME) system would be in place, covering at minimum the forestry and mining sectors, and confirmed by explicit agreements (MOU) between EPA, GFC and GPMC.

E. Supervision and reports

3.38 Due to its short duration and complex nature, the project would benefit from close supervision by Bank headquarters, in support of the role of the field office. The Bank's project team would remain functional and would participate actively in periodic supervision missions. The field office would be directly responsible for day-to-day supervision, to facilitate the application of Bank funding to acquisitions and contracts.

3.39 The Bank will reserve funds to contract an ex-post evaluation to assess attainment of project objectives and expected results. The evaluation will focus on: (i) success in attracting and retaining qualified personnel; (ii) timely completion of major project tasks and goals marked in the Logical Framework (Annex III-1) and Timetable (Annex III-7); (iii) improvements in technical performance of EPA, GFC and GPMC attributable to project

implementation; (iv) soundness of financial and administrative operations; and (v) sustainability over time of the principal systems established with the project.

3.40 EPA would generate the following reports:

- a. Initial report: Within 60 days from contract signature, EPA would present a report which would include: (i) progress in recruiting EPA staff and technical assistance; (ii) inter-agency agreements (Memoranda of Understanding) to implement the Environmental Quality Control (EQM) and the Environmental Monitoring and Enforcement (EME) systems, and implementation schedule; (iii) planned acquisitions and execution of physical investments; and (iv) a detailed workplan for project implementation, including all major activities required to fulfill project objectives and corresponding staff responsibilities.
- b. Progress reports: EPA would produce two progress reports; the first will be due at the end of the eighth (8) month, and the second at the end of the fourteenth (14) month, after initiation of project activities. The progress reports would detail adherence to the workplan, adjustments that were deemed necessary, and overall achievement of project objectives and timetable. The progress reports would be sanctioned by EPA's Board of Directors and presented to the consideration of the Bank.
- c. Final report: a final technical and financial report would be presented by EPA at the conclusion of project implementation. This report would summarize project accomplishments and shortcomings, and principal outputs. Special attention will be given to a long-term funding strategy, as well as to the expected ability of EPA to retain the staff secured through project funding. There will also be a description of expected future donor activities.

3.41 The technical and financial reports generated by EPA would be presented to the Bank. These will be discussed during the supervision missions.

F. Costs and financing

3.42 The total cost of the project is estimated at the equivalent of US\$1.65 million. Bank's contribution would be the equivalent of US\$1.5 million, to be disbursed in US\$, and derived from the net income of the Fund for Special Operations (FSO). GOCY counterpart funding would be the equivalent of US\$150,000. Estimated costs and contributions by source are summarized in the following table (See Annex III-8 for detailed budget).

3.43 The Bank's contribution would be devoted mainly to finance the operation of EPA, GFC and GGMC, provide them with adequate

personnel and technical assistance and training funding, permit the acquisition of basic data management and communications equipment, as well as to support direct costs of mobilization to the country (See Annex III-9 for detailed account contributions by Bank versus other sources).

- 3.44 The GOGY's financial contribution would go principally to cover salaries for local EPA personnel. Beyond this monetized contribution, the GOGY will provide EPA with basic installations, and with the support of higher management as members of the BoD and advisory bodies contemplated as part of EPA's structure. The GFC and GGMC will provide supervision, logistical support and field operation supplies to facilitate the task of the environmental officers and inspectors, and more generally to support the EQC and EME systems, pursuant to the MOU that will be signed by the parties.

G. Special conditions

- 3.45 The GOGY and the Bank have agreed on placing, as conditions prior to approval: (i) notification of the structuring and initiation of operations of EPA's Board of Directors, under the characteristics stated in the EPA Act, placing special emphasis on civil society representation and amerindian interests; (ii) presentation of a copy of the ministerial Order of Appointment which brings the EPA Act into operation; and (iii) presentation of a complete list of EPA staff and long-term technical assistance positions, including clear lines of authority.
- 3.46 The following conditions for first disbursement were agreed: (i) contracting and assumption of duty of EPA's Executive Director and Administrative Director, through international competition and based upon terms of reference and qualifications previously approved by the Bank; (ii) appointment of the members of the Environmental Appeals Tribunal, members of the Environmental Assessment Board, and of the Trustees for the Environmental Trust Fund, all according to the provisions of the EPA Act; (iii) appointment of the institutions represented in the Inter-Agency Technical Group; (iv) signature of Memoranda of Understanding between EPA and participating agencies, including detail of the latter's representatives to the Inter-Agency Technical Group; and (vi) evidence of inclusion of counterpart funding for the first year of EPA operation within the national budget.

GUYANA: ENVIRONMENTAL MANAGEMENT PROGRAM BUDGET (Thousand US\$)				
	ITEMS	IDB	LOCAL	TOTAL
2.	INDIVIDUAL CONSULTANT	798.36	134.1	932.46
2.1	Compensation	0	98.1	98.1
	Honoraria EPA	0	98.1	98.1
2.2	Fees	454	36	490
	Strengthening EPA	300	0	300
	Legislative reform	58	0	58
	Strengthening GFC & GGMC	96	36	132
2.4	Other payments	180	0	180
	EPA Subsistence expatriates	180	0	180
2.5	Travel on official Business	164.36	0	164.36
	Strengthening EPA	89.16	0	89.16
	Legislative reform	26.12	0	26.12
	Strengthening GFC & GGMC	49.08	0	49.08
3.	STUDENTS & PARTICIPANTS	96	0	96
3.2	Subsistence	44	0	44
	Strengthening EPA	20	0	20
	Legislative reform	4	0	4
	Strengthening GFC & GGMC	20	0	20
3.5	Teaching materials	17	0	17
	Strengthening EPA	5	0	5
	Legislative reform	2	0	2
	Strengthening GFC & GGMC	10	0	10
3.9	Seminars and workshops	35	0	35
	EPA	20	0	20
	Legislative reform	15	0	15
6.	GENERAL SUPPORT	410	0	410
6.1	Premises	50	0	50
	EPA. Refurbishing	50	0	50
6.2	Furniture and fixtures	30	0	30
	EPA. Refurbishing	30	0	30
6.3	Equipment	129	0	129
	Strengthening EPA	36.2	0	36.2
	Strengthening GFC & GGMC	92.8	0	92.8
6.4	Supplies	174	0	174
	Strengthening EPA	94	0	94
	Strengthening GFC & GGMC	80	0	80
6.8	Communications	27	0	27
	Strengthening EPA	9	0	9
	Strengthening GFC & GGMC	18	0	18
7.	PUBLICATIONS	30	0	30
7.1	Preliminary printing costs	20	0	20
7.4	Distribution	10	0	10
8.	CONSULTANTS FOR EVALUATION	50	0	50
	SUBTOTAL	1384.36	134.1	1518.46
98.	CONTINGENCIES (approx. 10%)	115.64	15.9	131.54
	TOTAL	1500	150	1650

IV. BENEFITS AND RISKS

- 4.1 The project will contribute to overcome some of the major obstacles to Guyana's sustained environmental management, by making operational government agencies responsible for those tasks. Emphasis will be placed as much on generating positive, self-reinforcing processes (participatory policy-making, self-monitoring and enforcement programs, inter-agency coordination mechanisms) as on achieving short-term specific outputs (environmental regulations and procedures).
- 4.2 Bringing Guyana into the mainstream of environmental management practices is considered a high priority in view of the imminent pressures that derive from the implementation of current economic growth policy, as well as from existing social constraints that impact upon its valuable, though fragile, natural resource base.
- 4.3 The project responds to a clear sense of priorities, by focusing on the forestry and mining sectors; developing environmental regulations to prevent undesirable environmental impacts from the exploitation of those resources, as well as devising general policies to address broad natural resource management issues.
- 4.4 The principal and widely acknowledged risk faced by this operation is the lack of adequately trained personnel to undertake all the tasks required under the project. This deficiency affects more acutely the EPA strengthening, as it would require personnel trained in highly specialized areas, where international competition is still high. A recruitment effort undertaken during project preparation made clear that human resources available locally would not suffice to cover project needs.
- 4.5 Thus, the project has been designed to accommodate expatriate technical assistance, giving preference to Guyanese nationals willing to return to Guyana and providing them sufficient economic incentives; the project will also strive to offer competitive fees to attract specialized international specialists. Potential high supply of qualified specialists for these services, as attested by demands of information received by Bank headquarters and field office, gives assurance for successful project implementation. The continuation of EPA operation, however, would have to be ensured by means of: (i) continued recruitment effort; (ii) development of an effective cost-recovery strategy; and (iii) securing additional international support.
- 4.6 The quest for financial sustainability of the EPA has been given significant attention in project planning. The Agency has been structured as a small, compact body with only essential personnel, and relatively low recurrent costs. The elaboration of a long-term financial plan is one of the first tasks to be undertaken early in project implementation. Additionally, a conscious effort was made

to restrict the size of the operation for the start-up period, so as to have a manageable, not overly-ambitious or complex program. Yet, the need to attract well-trained personnel has resulted in relatively high staffing costs. The risk consists of creating an excessive payroll burden for the government after project completion.

- 4.7 Participation of external funding sources could help diminish the risk by delaying its impact. A strategy of gradual phasing in of central government/internal resources while phasing out external support is recommended. Such strategy, which was not deemed practicable for implementation of this project due to its short duration, would be the basis of EPA's long-term financial plan, where this risk will be addressed directly.

V. EVALUATION

- 5.1 The evaluation of the present operation would be a continuous process through periodic programming and progress reports whose results will impact the continuation of activities and funding.
- 5.2 Both Bank headquarters and field office in Guyana will be involved in following up the development of this operation, and will generate reports which would be used by the Bank and to better direct the execution and continuation of project activities.
- 5.3 Additionally, the Bank and the government of Guyana have agreed on undertaking an ex-post evaluation of the project, as described before.

ANA: ENVIRONMENTAL MANAGEMENT PROGRAM

LOGIC

OBJECTIVES	INDICATORS	VERIFICATION MEANS	ASSUMPTIONS
Goal			
To enhance Guyana's capabilities to prevent undesirable environmental impacts from development programs	1. Environmental policy statements completed by EPA Inter-agency coordination agreements	1. Policy brief generated and adopted as EPA's contribution to environmental policy in GY Attendance and minutes of the Inter-Agency Technical Group	1. Political will present to enforce EPA EPA ability to engage other agencies the agenda expressed in the policy
Purpose			
Strengthen EPA	1. Start regular operations of the Agency	1. Initial and periodic progress reports	1. EPA capable of fulfilling contractual conditions, initiating disbursements administering project funds
Components			
Strengthening of EPA: provision of technical, legal and administrative staff	1. Executive Dir., Administrative Dir. and other principal positions filled adequately Timely engaging of technical assistance	1. Successful international competition Main contracts signed before disbursement Clear and well conceived workplan for first months, including use of TA resources BOD enactment of systems; MOU signed	1. Willingness to select the best qualified through transparent competition Recruitment strategy works well Salaries being offered are attractive Design is workable, avoids bottlenecks
Development of environmental legislation	2. Regulations to implement EPA Act Env. regulations for forestry & mining Env. regulations to guide private investors	2. Regulations brought into force by the Minister Progress reports on enforcement process	2. Political support in Cabinet & Parliament Agreement with GFC & GGMC
Institutional strengthening of GFC & GGMC	3. GFC&GGMC agreement to participate in the project & contribute to implement policies Clear plan to conduct a coordinated field monitoring program for EPA, GFC & GGMC	3. Memoranda of Understanding specifying commitments and agreements (MOU) Plan reviewed by project team	3. Role of EPA worked out; institutional mandates & relations clarified

PROPOSED RESOLUTION

GUYANA. TECHNICAL COOPERATION. ENVIRONMENTAL MANAGEMENT PROGRAM

The Board of Executive Directors

RESOLVES:

1. That the President of the Inter-American Development Bank, or such representative as he shall designate, is authorized, to enter into such agreements as may be necessary with the Cooperative Republic of Guyana and to adopt such other measures as may be pertinent for the execution of the plan of operations referred to in Document AT- _____, with respect to a technical cooperation in support of the Environmental Management Program.

2. That up to the amount of US\$1,500,000 is authorized for the purpose of this resolution, chargeable to the net income of the Fund for Special Operations.

3. That the above mentioned sum is to be provided on a non-reimbursable basis.