

ENVIRONMENTAL PROTECTION AGENCY



ANNUAL REPORT 2013

## TABLE OF CONTENTS

<b>OVERVIEW OF ACHIEVEMENTS 2013.....</b>	<b>1</b>
<b>1. GUIDING LEGISLATION AND STRATEGIES.....</b>	<b>17</b>
1.1 MISSION .....	17
1.2 ENVIRONMENTAL PROTECTION ACT .....	17
1.3 FUNCTIONS .....	17
1.4 STRATEGIC PLAN .....	18
1.5 ORGANIZATIONAL STRUCTURE .....	18
1.6 PROGRAMME AREAS .....	20
<b>2. ENVIRONMENTAL MANAGEMENT .....</b>	<b>24</b>
2.1 ENVIROMENTAL MANAGEMENT- PERMITTING/AUTHORISATIONS .....	25
2.2 HAZARDOUS WASTE/MATERIAL & AIR QUALITY MANAGEMENT .....	30
2.3 RESEARCH AND DEVELOPMENT .....	32
<b>3. ENVIRONMENTAL MANAGEMENT COMPLIANCE AND ENFORCEMENT.....</b>	<b>35</b>
3.1 COMPLAINTS MANAGEMENT .....	36
3.2 COMPLIANCE .....	38
3.3. CROSS-SECTORAL PROGRAMMES .....	40
<b>4. NATURAL RESOURCES MANAGEMENT .....</b>	<b>42</b>
4.1 PROTECTED AREAS .....	42
4.2 SUSTAINABLE USE OF BIODIVERSITY .....	47
<b>4.3 CONSERVATION AND SUSTAINABLE USE OF WILDLIFE .....</b>	<b>55</b>
<b>5. EDUCATION AWARENESS AND CAPACITY BUILDING .....</b>	<b>57</b>
5.1 DEVELOPMENT OF EDUCATIONAL MATERIALS.....	57
5.2 OUTREACH .....	59
6.3 MEDIA PROGRAMMES .....	67
5.4 DOCUMENTATION CENTRE.....	68
5.5 PICK IT UP GUYANA .....	68
<b>6. ADMINISTRATION .....</b>	<b>73</b>

6.2 ADMINISTRATIVE UNIT .....	73
6.3 HUMAN RESOURCES .....	76
6.4 INFORMATION TECHNOLOGY .....	78
<b>7.0 CONCLUSION .....</b>	<b>81</b>
<b>APPENDICES .....</b>	<b>82</b>

## LIST OF FIGURES

Figure 1: Organizational Structure of EPA. ....	19
Figure 2: EPA Programmes, Components and Links. ....	20
Figure 3: Types of Environmental Applications in 2013. ....	26
Figure 4: Types of Environmental Authorisation Applications in 2013 by Sector and Region.....	28
Figure 5: Distribution of Environmental Authorisations Granted in 2013.....	28
Figure 6: Environmental Authorisation Granted in 2013 by Sector and Region. ....	29
Figure 7: Applications Received and Environmental Authorisations Issued during 2010-2013. ....	30
Figure 8: Organogram of the Environmental Management Compliance and Enforcement, and the Environmental Management Permitting Divisions. ....	35
Figure 9: Overview of Types of Pollution Reports Received in 2013. ....	36
Figure 10: Location of Pollution Reports. ....	37
Figure 11: Number of Complaints Received, Investigated and Closed During 2012 and 2013. ....	37
Figure 12: Compliance Monitoring Inspections by Quarter. ....	38
Figure 13: Number of Compliance Inspections for 2012-2103.....	38
Figure 14: Summary of Legal Matters in 2013.....	40
Figure 15: Monthly Distribution of Applications Received in 2013. ....	48
Figure 16: Categories of Applications Permitted in 2013. ....	49
Figure 17: Research Applications Received in 2012 and 2013. ....	50
Figure 18: Educational Materials Developed in 2013. ....	59
Figure 19: Focus and Number of Presentations in 2013.....	66

**LIST OF TABLES**

Table 1: Exhibitions in which the Agency Participated in 2013 .....66

Table 2: TV Appearances in 2013 .....67

Table 3: PIUG Presentations in 2013. ....70

Table 4: Staff Employment Dynamics in 2013. ....77

## OVERVIEW OF ACHIEVEMENTS 2013

This year, the Environmental Protection Agency (EPA) succeeded in restructuring its Environmental Management Division into two separate Divisions, these being, the Environmental Management Permitting Division (EMPD) and the Environmental Management Compliance and Enforcement Division (EMCD). A new Director was recruited for the EMCD while the Director of the former EMD now heads the EMPD. This new arrangement is intended to result in greater efficiency and effectiveness in the delivery of the Agency's Environmental Management Programme.

Two other major achievements were the enactment of the Litter Prevention Regulations, and Wildlife Management and Conservation Regulations. These are critical to enforcement against littering, and for the management of wildlife use in Guyana.

The Agency has continued to implement the national component of Regional Biodiversity Projects. Under the Regional Biosafety Project, consultations towards the finalization of the National Biotechnology, Biosafety and Biosecurity Policy have been completed, and a Biosafety Bill along with four associated Regulations have been developed. When these legal instruments come into force they will strengthen Guyana's ability to deal with biosafety/biodiversity issues. A Regional Access to Genetic Resources and Benefits Sharing Project, and a Project to Review National Biodiversity Strategies and Action Plans and Develop the 5<sup>th</sup> National Report to the Convention on Biological Diversity begun implementation in 2013. Also, the Guyana Protected Areas System Project Phase II was in its extended phase of implementation.

The Agency continued to process large numbers of applications for environmental authorizations and environmental complaints. It received three-hundred and ninety-two (392) applications for environmental authorization and issued two-hundred and forty-four (244) environmental authorizations this year. In the area of complaints, two-hundred and sixty-six (266) pollution reports were received and one-hundred and twenty-three (123) were investigated. These complaints concerned dust, noise and fumes primarily from furniture manufacturing, operation of generators, spray painting, and livestock rearing.

The Agency received a subvention of G\$191,596,000 from the GoG in 2013, compared to G\$160,920,000 in 2012. The difference (\$43,739,000) between the subvention received and the actual expenses for the year was supported by the Agency's Trust Fund.

## Environmental Management

**New Compliance and Enforcement Division:** The Environmental Management Division (EMD) was officially split into the Environmental Management-Permitting Division (EMPD) and the Environmental Management Compliance and Enforcement Division (EMCD). In this new structure, the EMPD manages the authorization of projects, while EMCD oversees compliance of regulated (permitted) and non-regulated activities under the EP Act and its Regulations. A new Director was hired to oversee the management of the EMCD.

### Environmental Management – Permitting

- **Applications for Environmental Authorization:** Environmental Authorizations for new development projects and existing operations continued to be processed. Three hundred and ninety-two (392) applications for Environmental Authorizations were received for projects in the Agriculture, Fisheries, Tourism, Mining, Forestry, Energy, Industry, and Infrastructure sectors.
- **Distribution of Authorization Applications:** The majority (one hundred and thirty-one (131)) of the applications related to the mining and forestry; sixty-two (62) applications to Industry, Infrastructure and Energy; twenty-seven (27) to Agriculture, Fisheries and Tourism; and nine (9) to Hazardous Waste/Materials and Air Quality Management.
- **Projects in the EIA Process:** Seven (7) EIA required projects were processed during 2013. In addition, three (3) projects submitted applications for Environmental Authorisation in 2013, and are yet to commence the process. One (1) Project, relating to petroleum exploration, required the submission of a Strategic Environmental Assessment (SEA).
- **Projects Requiring EMPS:** Thirty-two (32) projects were required to prepare Environmental Management Plans (EMPs) during 2013. At the end of 2013, EMPs were pending for five (5) projects.
- **Environmental Authorizations Issued:** Two hundred and thirty-nine (239) Environmental Authorizations were issued during the year 2013: seventeen (17) Environmental Permits, twenty-one (21) Operation Permits, four (4) Construction Permits, five (5) Letters of Authorisation, thirty-three (33) Renewal Permits, one (1) Modification of Environmental Authorization, and one hundred and sixty-three (163) Noise Permits.

The main constraints for the issue of Permits were: the high workload to human resources ratio, and delays in the submission of outstanding information by applicants requesting an EA. There is a continuous effort to ensure these projects continue with the process of Authorisation.

- **Hazardous Wastes/Materials:** Three (3) draft Guidelines were developed in relation to management of: Compact Fluorescent Lamps; Mercury Contaminated Waste; and, Electronic Wastes. Also, a Treatment Options for Waste Oil proposal; Hazardous Wastes database format; and Permit conditions for Scrap Metal Operations were developed. Consultations and meetings were conducted with private and government Agencies to inform and promote awareness regarding their roles in hazardous wastes management.
- **Projects:** A number of applications for projects requiring environmental authorization were processed and are still being processed. During 2013, twelve (12) applications from prior years continued to be processed, while eight (8) applications were received in 2013. Of these, seven (7) environmental authorisations were issued during 2013.
- **Air Quality:** Several tools/ guidance documents were developed including: *A Particulate Matter Air Quality Monitoring Protocol* for a rice mill; *Air Quality Monitoring Protocol* for Linden; *Air Quality Needs Assessment Proposal*; Air Quality database; and Environmental Guideline: *“Implementation of the Environmental Protection (Air Quality) Regulations 2000”*.
- **Monitoring:** Particulate Matter Air Quality Monitoring was conducted for a Rice Mill located on the ECD. Also, Air quality compliance monitoring for particulate matter was conducted for the UG and BOSAI Bauxite Plant. Assistance was provided in the collection of Air Quality Data for the Sheriff/Mandela Road Expansion Project.
- **Guidelines, Standards and Code of Practice:** In collaboration with the GNBS and other relevant sector agencies, the EPA contributed to the process to review and amended the Specification for Labeling of Commodities and Labeling of Equipment, Items and Parts containing Refrigerants. The Agency also worked towards the implementation of the ISO 17020 Standard for Inspection bodies through the implementation of an Action Plan.
- The Environmental Guidelines for Poultry Rearing Operations and the Revised Environmental Guidelines for the Preparation of Environmental Management Plans (EMP) were finalized. Further, Environmental Guidelines for Landfills and Aquaculture were

drafted and the Agency is seeking support from the Ministry of Agriculture - Fisheries Department to further advance the Aquaculture Guidelines.

- **Revision of EM Tools:** Applications for Environmental Authorisation (New Projects and Existing Projects); Checklist for documents required to proceed with the Authorisations Process; and, List of Projects Requiring Environmental Authorisation were revised.
- **Revision of Fee Criteria:** The Fee Criteria for New Projects was reviewed and approved by the EPA Board and the review of the Fee Criteria for Existing Project was started.
- **Establishment of Water Quality Unit within the EPA:** A proposal for the establishment of a Water Quality Unit within the Agency was developed and submitted to MNRE for endorsement.
- **Compliance and Enforcement Regulations:** TA funding agreement was signed between the EPA and the WWF to develop Environmental Protection Enforcement and Compliance Regulations; a Consultant was hired.

## **Environmental Management Compliance and Enforcement**

- **Complaints Management:** Two hundred and sixty-six (266) pollution reports (complaint cases) were received for 2013. These concerned dust, noise and fumes primarily from furniture manufacturing, operation of generators, spray painting and livestock rearing. The majority of these complaints were along the East Coast of Demerara, Georgetown, and the East and West Banks of Demerara. One hundred and twenty-four (124) complaint cases were investigated for the year, and forty-four cases (44) were closed.
- **Compliance inspections:** One hundred and eleven (111) compliance Inspections were conducted during 2013 representing an eighteen percent (18%) increase in compliance inspections over that of 2012. The Agency begun to focus its compliance monitoring based upon risks hence, during the latter part of the year, the majority of the inspections focused on noise and waste management permit conditions for Sawmills and Lumberyards. Operations were generally found to be compliant with these conditions.



- **Compliance Monitoring:** Several large-scale developments were monitored to mitigate the effects of environmental pollution, namely, Bosai Minerals (Guyana) Inc., Haags Bosch Sanitary Landfill, and Ricemills in the Mahaica, and Dryshore, Essequibo, areas.
- **Compliance Assistance:** Compliance assistance in the form of technical guidance and advice was given to permitted projects and other industrial and development activities during the latter part of the year.
- **Enforcement:** Fifteen (15) Prohibition Notices were issued in 2013, the majority of them to spray painting and furniture operations along the East Coast of Demerara. Ten (10) Injunctions were served, most of them in the East Coast of Demerara. Three (3) of the injunctions issued were adhered to/resolved.
- **Litter Prevention Regulations:** The Environmental Protection (Litter Prevention Regulations, 2013) was enacted in 2013. This along with the Environmental Protection (Wildlife Management and Conservation Regulations) were Gazetted on the November 16, 2013.
- **Coastal Resource Map:** The GIS and the ICZM units commenced the joint development of a Coastal Resource Map for Guyana. To-date, topographic scans of Guyana's Coast have been received from the Guyana Lands and Survey Commission; Turtle Nesting Sites from Guyana Marine Turtle Conservation Society; Mangrove areas from the Guyana Forestry Commission; and 5m Rapid EYE satellite imagery from the Guyana Forestry Commission. This covered the entire Guyana and will be used by the Agency in 2014 to show land used change over time.
- **Reviving the Integrated Coastal Zone Management Programme (ICZM):** Steps were taken to revive ICZM programme; among them soliciting voluntary participation from representatives of regional and national institutions on the ICZM Advisory Committee; drafting of the TOR for the Advisory Committee; and review of the ICZM Action Plan were successfully completed. Public Education and Awareness activities included continued participation in the coastal cleanup initiatives in the Berbice area and presentations to seventeen (17) schools on the importance of the coast and marine debris impact on marine life. Also, research was conducted towards the development of a strategy for the delineation of the Coastal Zone.

## Natural Resources Management

The EPA is required to coordinate and maintain a programme for the conservation and sustainable use of biological diversity in Guyana as well as to design, source funding for, execute and implement projects to assist in achieving the general objectives and programmes of the Convention on Biological Diversity (CBD), for which it is the National Focal Point.

The objectives towards sustainable use and conservation of biodiversity are implemented under the Agency's Natural Resources Management (NRM) Programme which is organized into three components namely: Protected Areas, Biodiversity, and Wildlife.

### PROTECTED AREAS

EURO 5 M has been made available to support Phase II of the Guyana Protected Areas System (GPAS) - Conservation of Tropical Forests Project, under a financing agreement between the Governments of Guyana and Germany, represented by the KfW Entwicklungsbank (the German Development Bank). Of this, EUR 1M (Tranche I) is to finance small-grant project activities and EUR 4 M (Tranche II) is for supporting a sustainable and long-term financing mechanism for the National Protected Areas System. Highlights of achievements this year under this Project are:

- **Disbursements:** Two disbursements in the sums of EUR 173,770 and EUR 101,797 were received for the GPAS II.
- **KfW Mission:** KfW, Germany and GFA Consulting Group conducted a Mission to Guyana this year resulting in an *Aide Memoire* that the GPAS Phase II would be extended to December, 2014.
- **GPAS Operation Plan:** The Operational and Financial Plan was revised to support the Project during its extended Phase. Based on discussions with KfW, it will be further revised to include proposed infrastructure development at Kaieteur National Park.
- **GFA Consultancy:** The Proposal and Amendment II to the Contract submitted by GFA Consulting Group for Consultancy Services to GPAS II in its extended phase was submitted to KfW for no-objection. The GFA continued to offer support in the areas of proposal development and general project management, as such, the third, fourth and fifth interim payments were made to GFA.

- **Management Planning Project for Shell Beach** – The proposal for the Management Plan Process was developed and submitted to KfW for approval. Also, a pre-management planning consultation was conducted at Shell Beach in collaboration with the Protected Area Commission (PAC).
- **Tukeit Guest House and Warden’s/Caretakers Building** – Upon termination of the contract with the previous contractor, a new contractor was engaged to complete the building; it was forty percent (40 %) completed at the end of the year.
- **Building for the Protected Areas Commission** – Contracts for the construction and supervision components of the sub-project. At the end of the reporting period, the construction works for the building are approximately seventy five (75%) completed.
- **Equipment and Furnishing for the PAC** - The PAC procured office equipment and furniture for the functioning of its offices with assistance from the EPA. Also, two vehicles for the PAC were procured and handed over to the PAC.
- **Follow-up Support to GPAS I Community Based Sub-Projects and Baseline Study** - Unspent funds from GPAS Phase I were used for two consultancies to collect data on projects implemented under the Phase. A team of three (3) consultants collected the data at Shell Beach and Kanuku Mountains Protected Areas, and the Final Reports for the Follow-up and Baseline Study were submitted to KfW.
- **Utilisation of the GPAS I Unspent Funds** - A proposal for the utilization of the unspent funds was submitted to KfW as well as proposal for the utilisation of the remaining EUR 85,000 of unspent funds to support infrastructure development at Kaieteur; these were approved ‘in principle’, by KfW.

The GFA Consulting Group administered the follow-up measures within the communities of the GPAS I sub-projects as agreed in the GoG-KfW Aide Memoire. As such, two photovoltaic systems were installed at the Kamwatta and Warapoka multi-purpose buildings, respectively, and a cassava grating mill was procured for the Assakata Village. Construction works for the extension of the water trestle is approximately seventy percent (70%) completed.

- In relation to the infrastructure development of a staff living quarters at Kaieteur, Innovative Engineering Consultancy Services was contracted by the GFA Consulting Group

to develop the tender document including the design and bill of quantities for the competitive tendering of the project.

- **National Protected Area Trust Fund** – Based upon a legal opinion, a lawyer was contracted through the GFA Consulting Group to draft Regulations under the Protected Area Act (2011), in order to establish a Board of Trustees; the Regulations were completed and submitted to MNRE for Cabinet’s no-objection.

### **Biodiversity Research**

During 2013, applications were received worldwide from students, professionals, and institutions. The majority of the Research Projects were concentrated in the interior locations of the country, in areas such as, the Iwokrama Rainforest; Madhia; Rupununi; and in Regions 8 and 9.

- **Research Applications:** Fifty-five (55) Research Applications were received, forty-eight (48) of which were processed and approved and forty-five (45) Research Permits were issued.
- **Monitoring and Enforcement:** The monitoring and enforcement aspect of the Research process has been maintained over the period, when possible, by local counterparts from the University of Guyana and through linkages with other relevant sector agencies and organizations.

### **Regional Biosafety Project**

- **Legal and Institutional Framework for Biosafety:** Consultations on the draft Policy on Biotechnology, Biosafety and Biosecurity were held in eight (8) Administrative Regions. Feedback from these consultations is being used to update the draft Policy. Also, the Biosafety Bill is being drafted as well as four (4) associated Regulations. Further, the Institutional Framework for the management of Biosafety in Guyana was circulated to stakeholders for feedback and support.
- **Public Awareness Strategy:** Discussions were held with NCERD of the Education Ministry on possibilities for introducing Biotechnology and Biosafety in the school curriculum; students and teachers of grades 7-9 were proposed as an initial target group and the Ministry’s radio and TV programmes, literature and teacher training were proposed as strategies to raise Biosafety awareness.

- **Project Reporting:** The annual workplan and budget, as well as the expenditure statements for the first, second and third quarters of 2013 were submitted to the Regional Project Office. Additionally, the NSC met four (4) times for the year to discuss all matters relating to the project.

### **Regional Project on Access to Genetic Resources and Benefit Sharing**

- **Second Regional Meeting of the GEF ABS LAC Project:** The Agency participated in the workshop on Contract Negotiation on Access to Genetic Resources and Traditional Knowledge and the Second Regional Meeting of the GEF ABS LAC Project, in La Habana, Cuba. The main focus of the workshop was the review of the key elements of ABS in the framework of the CBD and the Nagoya Protocol; to review the situation of ABS Regimes in each of the participating countries, focusing on the main elements of each system, advantages, complexities and implementation of the Nagoya Protocol at national level.
- **Co-financing Report:** The Co-financing Report for the period July 2011 - December 2012 and the Expenditure Statement for the period January 2011 - July 2013 were prepared and submitted to the Regional Office.
- **Unspent Funds:** A proposal was submitted to the Regional Office for the use of the remaining funds under the project (USD 2,114). Subsequently, a consultant was single-sourced to review and finalize the draft ABS Regulations.
- **National Biodiversity Research Information System (NBRIS):** The NBRIS became operational and so far, seventeen (17) research applications were received through this system.

### **Revision of the NBSAPs and Development of Fifth National Report to the CBD**

- **Project Unit:** A Project Assistant was hired; and two half-year reports, two monthly expenditure statements, a co-financing report and an inventory of assets were prepared and submitted to UNEP.
- **Hiring of Consultant:** Advertisements were placed for consultants to submit technical and financial proposals for the Revision of the NBSAP and Preparation of the Fifth National Report; a suitable consultant was identified and hired.

- **Regional Workshop:** The Regional Workshop for the Preparation of the 5NR and Clearing House Mechanisms held in St. Lucia was attended. The purpose of the workshop was “to strengthen capacities of the countries in the region for preparing their fifth national reports and for developing their national clearing-house mechanisms”.

## **ACTO**

- The 1<sup>st</sup> meeting of the Special Working Group on the Amazon Regional Observatory held in Quito, Ecuador, was attended. Additionally, the Agency is awaiting guidance from the MNRE on the nomination of a focal point for the Amazon Research Network Centre and on the way forward for the establishment of a National Research Network Centre.

## **Mainstreaming Biodiversity Project**

- **Remaining GEF 5 STAR allocation:** Endorsement was received to utilise the remaining GEF 5 STAR allocation for a medium-sized Project (MSP) in relation to Mainstreaming Biodiversity into the Mining sector. The Project Information Form (PIF) was prepared and submitted and has been approved by the GEF Secretariat. A Consultant was hired to prepare the Project Document.

## **Country Support Programme**

- The GEF National website has been launch and can be accessed at [www.gefguyana.org](http://www.gefguyana.org); information on all past and current GEF funded projects is being compiled for uploading to the website.

## **Small Grants Programme (SGP)**

The Agency participated in the review of twenty-five (25) project concepts and eight (8) project proposals submitted to the SGP. Three (3) project proposals were approved for funding. Support to the SGP continues to be provided through National Steering Committee meetings and technical review of projects, objectives, and progress of the SGP work in Guyana.

## **Conservation and Sustainable Use of Wildlife**

- **Wildlife Conservation and Management (WMC) Regulations:** The WMC Regulations was enacted.

- **Investigation of Reports of Illegal hunting in Iwokrama (Protected Area):** Official reports of poaching or illegal hunting within the Iwokrama Protected Area were investigated which resulted in three persons being apprehended and fined.
- **Marine Turtle Symposium and Review of MoU:** Several meetings were held with WWF/GMTCS to discuss sharing of information and preparation for 11<sup>th</sup> Regional Symposium: Marine Turtle Conservation in the Guianas held in Suriname. Follow-up discussions are currently pending the renewal of MoUs for sharing of marine turtle data both locally and with Suriname and French Guiana.

### **Environmental Awareness and Capacity Building**

The promotion of public awareness and participation in protection, conservation and sustainable use of the environment is a key function of the EPA. This function is carried out primarily through the Education and Awareness and Capacity Building Programmes. While these Programmes are both cross-cutting, they are led by the Agency's Education, information and Training Division.

- **Development of Educational Materials:** Fifteen (15) new educational and informational materials were developed on various topics and distributed at different forums. Activity packages were compiled and distributed to schools in observance of international environmental days and twelve (12) training aids were developed on various subjects and used in outreach and training sessions.
- **Green Leaf Newsletter:** A quarterly Newsletter highlighting environmental issues, Agency news, projections and achievements, was produced and circulated electronically to a range of organizations and groups.
- **International Year of Water Cooperation:** 2013 was declared by the UN General Assembly as the *International Year of Water Cooperation* to highlight that cooperation is essential to strike a balance between the different needs and priorities and to share this precious resource equitably.
- **World Wetlands Day:** Five (5) interactive sessions were conducted with two (2) visiting primary schools at the Nature School on 'Wetlands and Water Management,' this year's theme.

- **World Water Day:** Two seminars were conducted under the theme: “*Water Cooperation*”, at two schools in the Essequibo Islands; presentations were also made on different occasions to five (5) NGOs. The Agency also collaborated with Guyana Water Inc. (GWI) in the execution of a debate and preparation of a news-spread for WWD.
- **Earth Day:** Earth Day 2013 was observed under the theme “The Face of Climate Change”. Activities coordinated and executed in collaboration with the MNRE, included an Earth Day newspaper feature and quiz and a radio tips. Outreach sessions were also conducted with eighteen (18) primary schools in Georgetown and its environs. These sessions were also used to launch the Art competition for International Biodiversity Day.
- **International Day for Biodiversity:** International Day for Biodiversity 2013 was observed under the theme: “*Water and Biodiversity*”. Activities were coordinated and executed in observance of IDB include an *Art Competition; Youth Forum; Biodiversity Tour; and Documentary Night*.
- **WED 2013:** WED was celebrated this year, under the theme: ‘**Think. Eat. Save. Reduce your footprint**’. This theme raises awareness of the impact that food choices have on the environment, and provide relevant information for informed decisions on food choice and consumption habits. Various activities were coordinated to get this message across including: *Green Walk; WED Ceremony and Exhibition; 2 Rides for the Environment; WED Forum; Environmental Camp; and two (2) Seminars*.
- **International Ozone Day:** Three (3) half-day workshops were conducted during in observance of the International Day for the Preservation of the Ozone Layer. These targeted twenty (20) primary and seven (7) secondary schools in Region 5.
- **Annual Taxidermy Camp:** Presentations were delivered to forty-four (44) participants on ‘Pollution and Waste Management’; games and other interactive activities were integrated in the presentations.
- **Zoo Camp:** Three (3) sessions on waste management were conducted at this year’s Zoo Camp which benefited sixty-six (66) children, aged 6 – 13, attending the Annual Zoo Camp at the Nature School.
- **Teacher Training Workshop:** Twenty-six (26) second year Trainee Teachers and one (1) Lecturer of the CPCE participated in the fourth Environmental Education Workshop during at Camp Wesleyana, Linden/Soesdyke Highway.



- **School Visits:** One hundred (100) students and ten (10) teachers from Corentyne Comprehensive Secondary School visited the Agency as part of a tour during which they were engaged in interactive activities aimed at informing them about the Agency's work and environmental issues.
- **Climate Change Outreach:** Climate Change outreach sessions were conducted with eighteen (18) primary schools in Georgetown and its environs. A total of nine hundred and thirty-one (931) students have participated thus far.
- **Solid Waste Management Workshops:** Four (4) half-day empowerment workshops on Waste Management and the Pick-it-Up Guyana initiative were conducted. These targeted seventy-one (71) students and ten (10) teachers from primary and secondary schools in New Amsterdam. The workshops were held during July 03-04, 2013, at the New Amsterdam Town Hall.
- **Nature School - Guyana Zoological Park:** In collaboration with the Guyana Zoo, Outreach three (3) sessions were conducted at the Nature School.
- **Presentations:** During the year, fifty-seven (57) presentations were prepared and delivered to one hundred and thirty-four (134) groups. The focus of these presentations was largely determined by the theme and observance of international environmental days; for most months, the focus changed, and for some months, there was a double focus.
- **Exhibitions:** An EPA booth was hosted at twelve (12) exhibitions for the year with focus such as careers; mining; plants; food wastage; marine life; trade; forests; etc. These provided the opportunity to interact with and engage the public in interactive activities on environmental issues as well as provide information materials.
- **Television:** There was participation in several television programmes, e.g. Guyana Today Show (NCN 11) and Day Break (MTV 65), to create awareness on WED 2013 and ICC 2013, and activities planned for their observance. Also, TV Stations in New Amsterdam (LRTS and NCN 15) gave coverage was to a Waste Management Empowerment workshop held in the town by the EPA.
- **Panel Discussions and TV Interviews:** Panel Discussions were coordinated in observance of three (3) environmental days: World Water Day; International Day for Biological Diversity; and, World Environment Day. Additionally, the Agency participated in two (3) television

interviews, two (2) were in observance of WED and one (1) in observance of World Water Day.

- **Press Releases:** Five (5) Press Releases were prepared for the year and sent for publishing in newspapers on subjects such as: Environmental Volunteer Training; World Environment Day Activities; WED Message; Response to newspaper article on the Konawaruk River; and MNRE's collaboration with the "Fashion Weekend" in observance of "World Water Week".
- **Litter Prevention Regulations (LPR):** A draft Communication Strategy on the LPR as well as simplified information on the Litter Regulations were created and submitted to the MNRE; the PSAs were shown on the TV Programme El Dorado Shines. Text for an additional eight (8) PSAs on the Litter Regulations was also prepared.
- **Newspaper Articles:** Articles were written and sent for publishing every week in the Guyana Chronicle and Guyana Times newspapers. However, some of the articles were not published because the newspapers gave priority to other paid material. Forty-two (42) articles were published for the year in the "Our Environment" Column in the Sunday Chronicle, while thirty-three (33) were published in the "Our Earth, Our Environment" featured in the Thursday Edition of the Guyana Times. Also, two (2) news spreads were prepared and published one for Earth Day and the other for the International Day for Biological Diversity.
- **Pick-It-Up Guyana (PIUG):** The PIUG initiative of the MNRE was launched in mid-2012 as a focused "clean-up" initiative supported by the private sector, public sector and concerned citizens and is being implemented in Georgetown, the coastal areas (Regions 2 – 6) and extended to mining communities and indigenous communities. Main activities for the year are as follows:
  - **Raising Awareness:** In 2013, PIUG conducted awareness activities to educate volunteers and school children about the environment; waste management; and, how to become environmental advocates.
  - **Presentations:** Fourteen (14) presentations were delivered on PIUG, pollution and the environment, and waste management techniques to various groups including religious organisations, non-governmental organisations, and students. PIUG also participated in four (4) exhibitions including GUYEXPO, where educational materials were distributed, and members of the general public were engaged.

- **Collaboration and Coordination:** Four (4) volunteer workshops were coordinated, and assistance was given to five (5) non-governmental organisations in planning and coordination of environmental enhancement activities. Also, PIUG undertook five (5) major joint activities: showing of the “Trashed” documentary; International Volunteer Day panel discussion; awareness sessions in interior locations; “Keep Guyana Clean” Sticker Project; and tree-planting.
- **Training:** PIUG attended the workshop ‘Sustainable Solid Waste Management in CARICOM countries’ in Okinawa, Japan; it also participated in workshops on using social media the right way, accessing funding from donor agencies, etc., hosted by the Ministry of Culture, Youth, and Sports.
- **Development of Educational Materials:** Two (2) posters on littering and PIUG facts, and two (2) brochures for citizens and businesses were finalized. Also, a PIUG banner and a board game (snakes and ladders) highlighting harmful and beneficial waste management practices were designed and printed for use at Guyexpo 2013. Environmental messages were created for memorabilia for distribution at exhibitions. A country report on activities for international coastal cleanup 2013 was prepared.

## Administration

The Administrative Division comprises the Administrative, Finance, Human Resources, Policy and Planning, and Information Technology (IT) Units. It procures and manages the provision of equipment and services, human and financial resources and financial as necessary to support the work of the Agency.

**Finance:** G\$191,596,000 was received from the GoG, compared to G\$160,920,000 in 2012. To meet the shortfall in the 2013 budget, \$43,739,000 was utilised from the EPA’s Trust Fund. During the year, the Agency was dependent on Miscellaneous Receipts to support its operational expenses.

**Procurement and Management:** The Audit Office conducted a physical check of fixed assets against maintained stock records, such as inventory and monthly stock reports. During the year, asset checks were made and the Asset Register updated. Equipment for water quality and noise

monitoring were procured as well as computers and software to support HR and Financial management. The Agency also procured security services for 2013.

Offices were prepared for the new Environmental Management Compliance Division (EMCD); Human Resources Assistant; and, Legal Officer. A contract was awarded for works to rehabilitate the Entrance Road and Parking Area within the Agency's compound.

**Information Technology:** Regular support and maintenance services were provided to the Agency's computers, LAN and databases to ensure that they performed to meet the needs of staff.

**Human Resources:** At the end of 2013, seventy-eight (78) staff members comprising seventy-four (74) full-time employees and four (4) project staff were in the employ of the Agency. There was constant need to replace staff who either resigned or had their employment terminated, as such thirty appointments were made during the year.

# 1. GUIDING LEGISLATION AND STRATEGIES

## 1.1 MISSION

The mission of the Environmental Protection Agency (EPA) is to *“take measures necessary for effective protection and management of the natural environment, coordination of conservation programmes, sustainable use of natural resources, assessment of the impact of development activities on the environment and the integration of appropriate environmental provisions into development planning”*.

## 1.2 ENVIRONMENTAL PROTECTION ACT

On June 05, 1996, the **Environmental Protection Act (EP Act)** was passed in Parliament, thereby, establishing the Environmental Protection Agency (EPA). The EP Act mandates the Agency to oversee the effective management, conservation, protection and improvement of the environment, the prevention and control of pollution, the assessment of the impact of economic development on the environment and the sustainable use of natural resources.

In working towards its mandate, the Agency enables Guyana to contribute to global and national environmental protection, sustainable use of natural resources, and conservation. To achieve its mandate, the Agency develops and implements education, regulation and enforcement programmes and uses partnerships and collaborative approaches to strengthen the impact of its interventions.

## 1.3 FUNCTIONS

The functions of the Agency are stated in the EP Act, Part II 4 (1) and can be classified broadly as being *regulatory, coordinating, and the promoting of public participation in environmental protection*.

As part of its regulatory functions, the Agency enforces the EP Act (1996) and its amendments, and the Environmental Protection Regulations (2000; 2013), to ensure that measures for environmental protection are integrated into development activities.

The Agency also coordinates the sustainable use and conservation of Guyana’s natural

resources. Both the coordinating and regulatory functions of the Agency are complex, spanning a range of inter-connected issues and requiring collaboration with private, public sector and non-governmental organizations.

Another major responsibility of the Agency is to promote the participation of the public in the process of integrating environmental concerns in the planning for sustainable development. This requires the provision of information to the public on environmental development projects, issues and problems, and on the Agency's procedures and processes.

#### 1.4 STRATEGIC PLAN

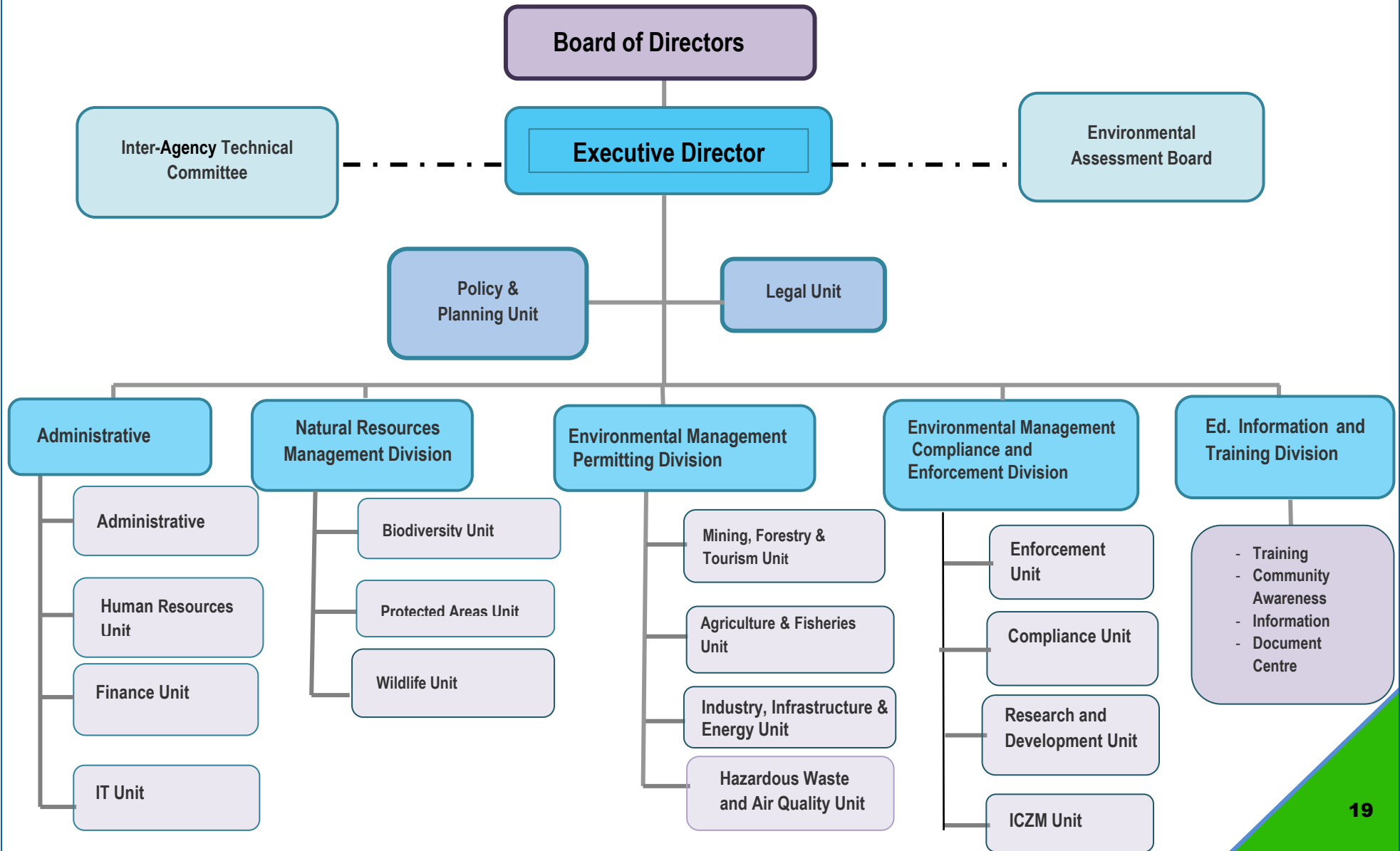
The Agency's 2006-2010 Strategic Plan identifies FOUR Themes which are linked to two levels of objectives: Outcomes at the first level, and Specific Objectives at the second level. The first theme: ***Promoting the Sustainable Use and Conservation of Biodiversity*** is implemented mainly under the Natural Resources Management Programme of the Agency. The second Theme: ***Environmental Protection and Management*** is implemented largely under the Environment Management Programme of the Agency. The third Theme: ***Environmental Information for Decision Making*** is implemented by the Education Information and Training Programme and is cross-cutting. The fourth Theme: ***Strengthening Institutional Capacity*** is also cross-cutting and is implemented under the Capacity Building Programme of the Agency.

The future strategic direction of the Agency will be guided by the Strategic Plan being developed by the Ministry of Natural Resources and the Environment (MNRE) as well as the Low Carbon Development Strategy (LCDS).

#### 1.5 ORGANIZATIONAL STRUCTURE

Figure 1 below shows the Organizational Structure of EPA during 2013. The Chairman of the EPA Board and the Executive Director of the EPA both report to the Minister of Natural Resources and the Environment.

Figure 1: Organizational Structure of EPA.



## 1.6 PROGRAMME AREAS

The mandate of the EPA is implemented through its Environmental Management (EM), Natural Resources Management (NRM), Education, Awareness, Capacity Building and Cross-Sectoral Programmes (Figure 2). The EM programme has four components: Environmental Authorizations, Monitoring and Enforcement, Complaints and Response, and Research and Development. The NRM Programme has three components: Sustainable Use of Biodiversity, Biodiversity Conservation, and Wildlife. The Education and Capacity Building Programme has two components: Education and Awareness and Training, and Capacity Building, both of which are cross-cutting.

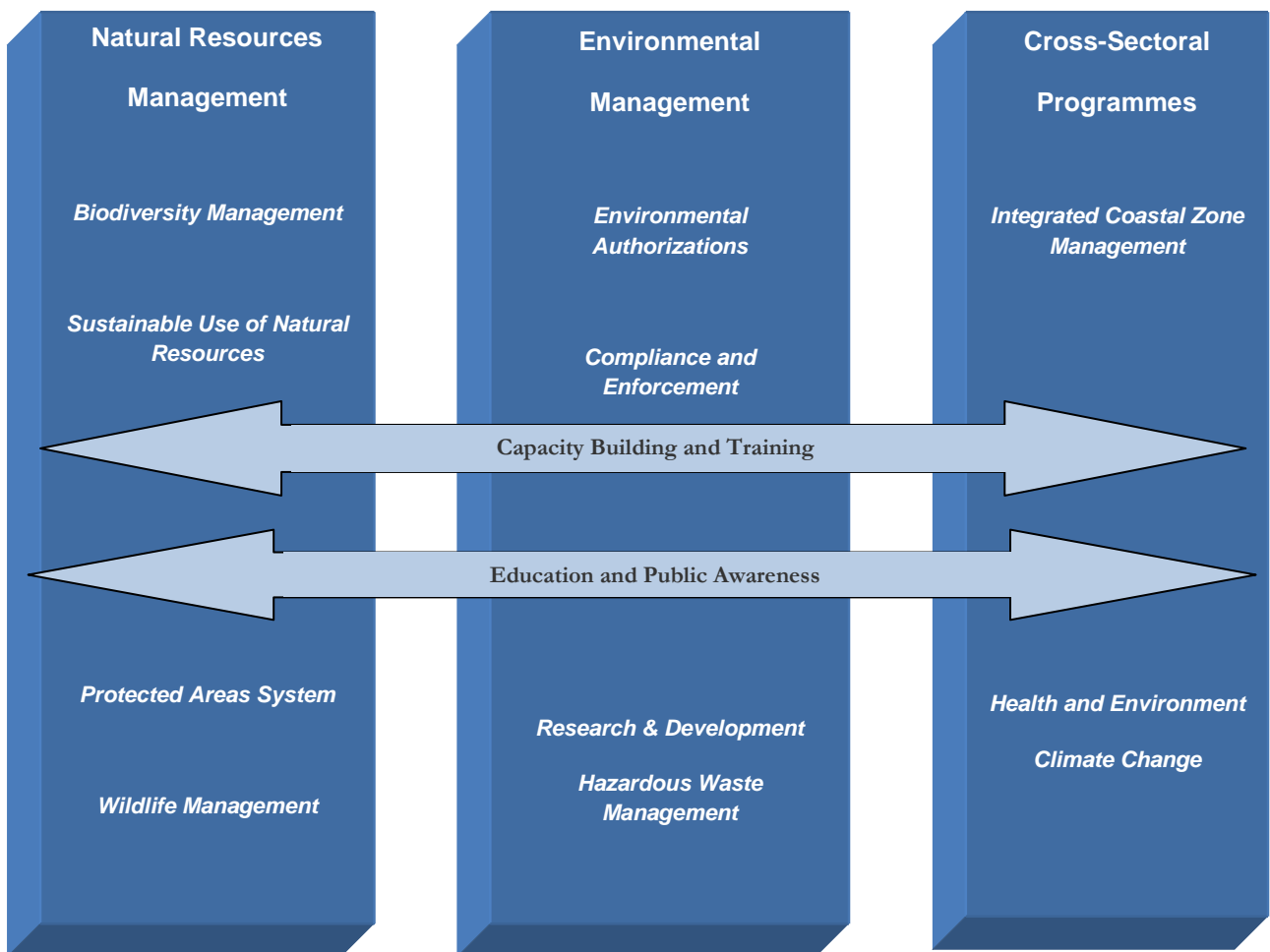


Figure 2: EPA Programmes, Components and Links.



## ENVIRONMENTAL MANAGEMENT

Through the EM Programme, the Agency works towards achieving its mandate for pollution control and prevention. As such, developmental projects are required to conform to the goal of sustainable development with the Agency overseeing an environmental authorization process and conducting environmental monitoring and enforcement. Some of the strategies of the Agency's EM programme include:

- **Authorising New Developments:** Any new development that may have a significant effect on the environment is required to apply to the Agency for an Environmental Authorization. When an application is received, it is screened by the Agency, which then publishes its decision, on whether an Environmental Impact Assessment is required or not, and whether an environmental authorization will be granted or not.
- **Monitoring of Environmental Authorisations:** To ensure that developments mitigate against pollution and remediate as necessary, they are monitored by the Agency. The ambient environment and specific requirements of Environmental Authorizations are also monitored.
- **Authorising Existing Developments:** The EP Regulations (2000) provide for the regularizing of existing industrial activities through a registration process. Existing operations are required to apply to the Agency for an Operations Permit, the granting of which, is dependent on compliance and good environmental management practices.
- **Developing Competencies in Environmental Management:** The Agency recognizes that its role would be much more effective if the stakeholders are aware of their responsibilities and the means by which these can be met.
- **Developing Regulations:** In keeping with the EP Act, the Agency pursues the development of Regulations.
- **Reviewing and Developing Standards, Environmental and Operational Guidelines and Codes of Practice.**
- **Coordinating Environmental Management through Stakeholder collaboration.**
- **Managing Environmental Complaints:** the EMCD continues to resolve legitimate environmental complaints.
- **Preparing for environmental emergencies.**
- **Enforcement.**

## **NATURAL RESOURCES MANAGEMENT**

Having ratified the Convention on Biological Diversity (CBD) and the Cartagena Protocol on Biosafety (CPB), Guyana committed to developing National Strategies, Plans and Programmes for the conservation and sustainable use of biodiversity, and the regulation of the transboundary movement and use of Living Modified Organisms (LMOs) and Genetically Modified Organisms (GMOs) and to take legislative, administrative and policy measures towards achieving these goals. Under the EP Act, 1996, the Agency is required to coordinate and maintain a programme for the conservation of biodiversity and its sustainable use in Guyana. These requirements and the responsibilities under the CBD and CPB are the primary focus of the NRM Programme.

To achieve the objectives of the NRM Programme, there is collaboration with various Sectoral Agencies and Institutions and with Amerindian Communities in Guyana. Some of the main collaborative sectoral partners include the Guyana Forestry Commission, Ministry of Agriculture, Wildlife Division, Guyana Geology and Mines Commission, University of Guyana, the Protected Areas Commission, among others. There is also collaboration with local and international Non-Governmental Organizations (NGOs), such as Conservation International – Guyana (CIG), the Guyana Marine Turtle Conservation Society (GMTCS), and the World Wildlife Fund for Nature (WWF), among others.

The most important strategy documents guiding the work of the NRM Programme are the National Biodiversity Action Plans (NBAP I and II) and the National Biosafety Framework (NBF), which outline the major programme areas for biodiversity management in Guyana as: Conservation of Biodiversity, Sustainable use of Biodiversity, and Conservation and Sustainable use of Wildlife.

## **CROSS-SECTORAL PROGRAMMES**

Currently, the Agency plays a role in a number of cross-sectoral programmes including integrated coastal zone management (ICZM), climate change, and solid waste management.

As part of its role regarding environmental coordination, the Agency's primary approach is to work with and to create strategic partnerships with existing organizations.

## **CONVENTIONS AND MULTILATERAL ENVIRONMENTAL AGREEMENTS (MEA)**

### *BASEL CONVENTION*

The EPA is Guyana's Focal Point for the Basel Convention for the control of trans-boundary movements of hazardous wastes and their disposal. The Agency complied with the requirements of the Convention regarding the notification of Hazardous wastes movements through the processing of notification documents to country of import as well as communicating with countries who wished to use Guyana as a transit point.

### *CARTAGENA CONVENTION*

The EPA is the implementing body for the Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region (Cartagena Convention). The Agency continued being actively involved in several activities related to the Convention.

## **EDUCATION, AWARENESS AND CAPACITY BUILDING**

The promotion of public awareness and participation in protection, conservation and sustainable use of the environment is a key function of the EPA as outlined in the EP Act (1996).

Through its Education Awareness and Capacity Building Programme, the Agency provides information in a range of formats to a wide segment of the population.

The delivery of the Programme entails working in close collaboration with the Environmental Management and the Natural Resources Management Programmes of the EPA as well as a number of Sectoral Agencies and Non-Governmental Organizations.

The purpose of the Programme is twofold, promoting public awareness of and participation in environmental decision-making as well as informing the public of the systems and procedures established by the Agency for environmental management and conservation.

## 2. ENVIRONMENTAL MANAGEMENT

During 2013, the Agency underwent a significant re-structuring/re-organising of its Environmental Management programme, a move intended to enhance the efficiency of environmental management through systematic and coordinated activities. In August, 2013, the Environmental Management Division (EMD) was officially split into two Divisions: Environmental Management Permitting Division (EMPD) and the Environmental Management Compliance and Enforcement Division (EMCD). Prior to this, the EMD was responsible for the entire Environmental Management Programme: Environmental Authorization; Complaints and Response; Monitoring and Enforcement; and, Research and Development. With the split, the EMPD manages the authorization of projects as stipulated in the EP Act, while EMCD oversees compliance of regulated (permitted) and non-regulated activities under the EP Act and its Regulations.

The re-organization was intended to provide a clear definition of the scope of each Division; this will enhance the management of associated programme areas, and contribute to improving the overall environmental management efficiency, one of the core functions of the Agency, and ultimately increase its reach and impact. Moreover, this change will allow the Agency to better align itself to contribute to the implementation of the LCDS. The EPA has been earmarked to provide support to this strategy through its monitoring activities, which will be enhanced with improved definition and capacity under this reconstitution.

The EMPD is currently supervised by the previous EMD Director and comprises the following Units: Agriculture, Fisheries and Tourism (AFT), Industry, Infrastructure and Energy (IIE), Mining and Forestry (M&F), and Hazardous Waste Management and Air Quality Unit (HWMAQ) to facilitate the authorization of projects as stipulated in the EP Act. Functions of the HWMAQ Unit are cross-cutting between the two Divisions.

The EMCD is supervised by a new Director and comprises the following Units: Research and Development (R&D), Integrated Coastal Zone Management (ICZM), Compliance Monitoring (CM), Enforcement (E), Geographic Information System (GIS) and the Field and Data Management. The GIS unit which was formerly under the management of the Administrative Division was relocated to this new Division. The Compliance Monitoring and Enforcement Units were newly created and the functions of Research and Development and the Field and Data Management are cross-cutting between the two Divisions.

Furthermore, the EMPD conducted Research and Development activities to improve its processes, practices, procedures and guidelines. During 2013, internal procedures of the Division continued to be revised and improved. These changes would contribute to enhancing the Division's efficiency in: processing Environmental Authorisations Applications; improving collaboration with Sector Agencies; ensuring the involvement of all relevant parties in the Authorisation of developmental activities and in the resolution of environmental complaints, and to provide better guidance to developers on how to meet the Agency's requirements for compliance.

Staff of the Divisions continued to function as representatives on various Committees and Boards.

## **2.1 ENVIRONMENTAL MANAGEMENT- PERMITTING/AUTHORISATIONS**

The Environmental Permitting Process as prescribed in the EP Act, 1996, the EP Regulations, 2000, and the EP Amendments, 2005, continued to be implemented. A comprehensive approach to environmental management was utilized, based on Regulations and Standards developed. The Agency continued to support the work of the Environmental Assessment Board (EAB).

Eleven (11) professionals with varying expertise in environmental management registered with the Agency to provide a range of services to developers applying to the Agency for Environmental Authorisation.

### **2.1.1 The Permitting Process**

The Agency continued to process Environmental Authorizations for new development projects and existing operations. During the year, three hundred and ninety-two (392) applications for Environmental Authorizations were received. These were for proposed projects to be located across the country and relating to Agriculture, Fisheries, Tourism, Mining, Forestry, Energy, Industry and Infrastructure sectors. Of the applications received, one hundred and five (105) were for New Projects, forty-one (41) for Existing Operations, seventy-three (73) for Renewals, nine (9) for Variance, one (1) for Transfer, and one hundred and sixty-three (163) for Noise

(Figure 3). The total number of Applications received increased by three (3) percent in relation to 2012.

Applications received for short-term noise permits continued to be the highest. Applications received for new developmental activities were significantly more than those received for existing operations. In fact, applications received for renewals were also higher than those received for existing operations. Nine (9) projects varied their operations during 2013.

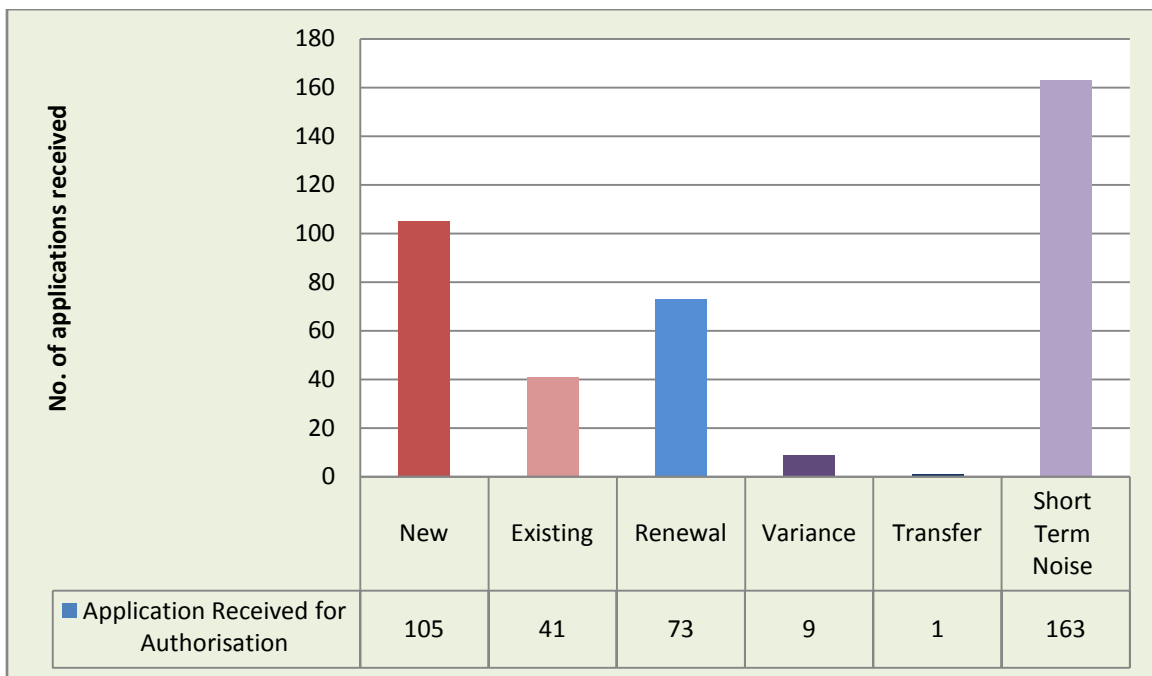


FIGURE 3: TYPES OF ENVIRONMENTAL APPLICATIONS IN 2013.

### 2.1.2 Distribution of Authorization Applications across EMD'S Sectoral Units

The Mining and Forestry Unit (M&F) received one hundred and thirty-one (131) Environmental Authorisation Applications, followed by Industry, Infrastructure and Energy Unit (IIE) with sixty-two (62), Agriculture, Fisheries and Tourism Unit (AFT) with twenty-seven (27) and the Hazardous Waste/Materials and Air Quality Management Unit with nine (9) (Figure 4).

For projects going through the Environmental Authorisation process, seven (7) EIA-required projects were processed during 2013. For the year, three (3) projects that required EIAs initiated the process, while four (4) continued to be processed from previous years. In addition, three (3) projects submitted applications for Environmental Authorisation in 2013, and are yet to commence the process. These projects are for the mining and forestry sectors. In addition, one (1) Project, relating to petroleum exploration, required the submission of a Strategic Environmental Assessment (SEA).

Further, thirty-two (32) projects were required to prepare Environmental Management Plans (EMPs) during 2013. Eighteen (18) of these were from previous years for which the Environmental Authorisation process continued into 2013 while, fourteen (14) additional projects were required to submit EMPs during 2013. At the end of 2013, EMPs were pending for five (5) projects.

An analysis of applications received by Administrative Region in Guyana indicates that the highest number was received from Region 6 with one hundred and seventy-six (176), followed by Region 4 with ninety-six (96), Region 3 with fifty (50) Applications, and Region 10 with thirty-three (33). A minimal number of applications were received for the other Regions. The applications received by the Regions covered all the sectors managed by the Agency. The highest number of applications received from Region 6 is attributed to the use and operation of noise-making instruments as compared to other developmental sectors. Whilst in Regions 3, 4, and 10, the greater number of applications received were for projects related to the Mining and Forestry sectors. Further, there were five (5) applications for seismic and multi-beam surveys offshore of Guyana (Figure 4).

### **2.1.3 Distribution of Environmental Authorisations Granted in 2013**

Two hundred and thirty-nine (239) Environmental Authorizations were issued during the year 2013; this represents a 24% percent decrease in relation to 2012 (316). The two hundred and thirty-five (235) permits were granted: seventeen (17) Environmental Permits, twenty-one (21) Operation Permits, four (4) Construction Permits, five (5) Letters of Authorisation, thirty-three (33) Renewal Permits, one (1) Modification of Environmental Authorization, and one hundred and sixty-three (163) Noise Permits (157 short-term and 6 long-term) (Figure 5).

Of the Authorisations granted this year, Environmental Permits were issued to one project requiring Environmental Impact Assessment (EIA) and seven (7) projects requiring Environmental Management Plans (EMPs).

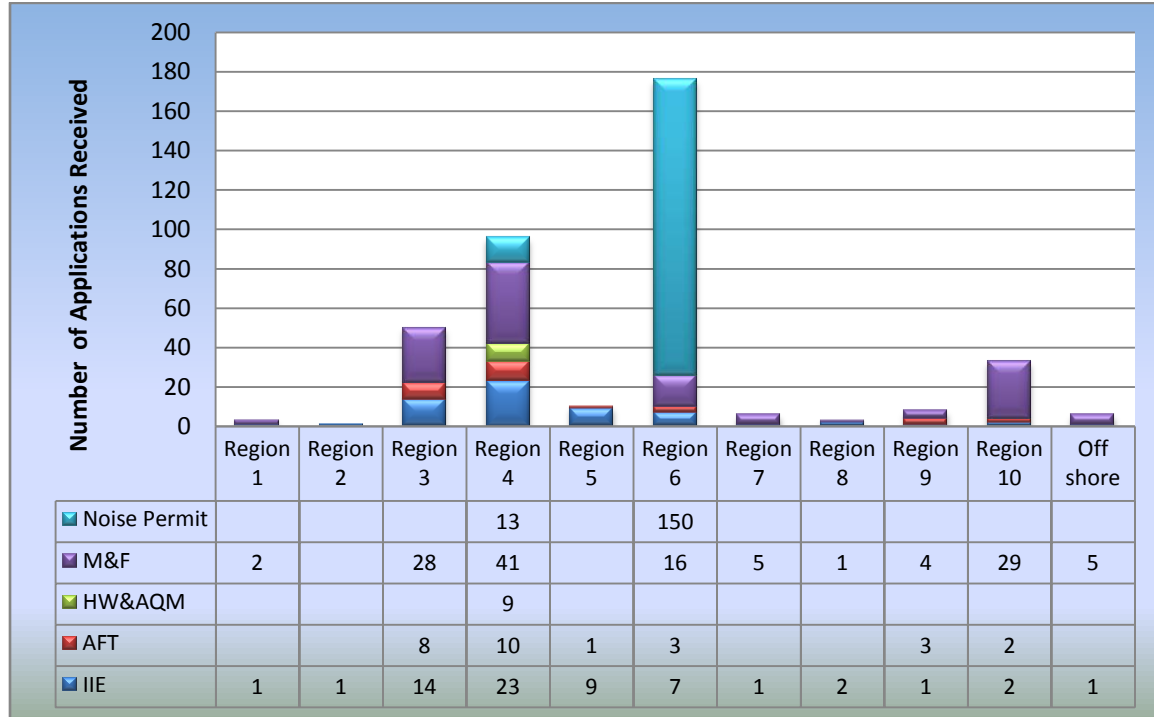


FIGURE 4: TYPES OF ENVIRONMENTAL AUTHORISATION APPLICATIONS IN 2013 BY SECTOR AND REGION.

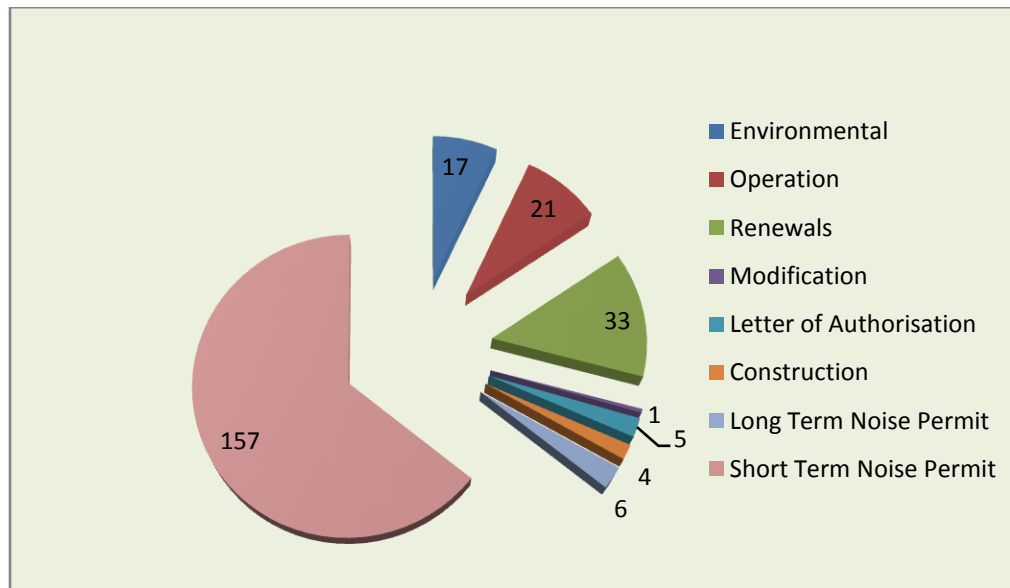


FIGURE 5: DISTRIBUTION OF ENVIRONMENTAL AUTHORISATIONS GRANTED IN 2013.



An analysis of Environmental Authorisations granted by Regions across Guyana indicates that the largest number was granted for Region 6, mainly for the operation of noise-making instruments (Figure 6). The second highest number was granted for Region 4 for activities in the Industry, Infrastructure and Energy sectors.

#### 2.1.4 Comparative Analysis of the Permitting Process

Figure 7 below shows a comparison of Applications received and Environmental Authorisations granted from 2010 to 2013. Trends varied over the four years; the highest number of Applications received was in 2011, followed by 2013. However, in 2012, the largest number of Environmental Authorisations was issued and the least in 2013. The main constraints for the issuance of Permits were related to human resources and submission of outstanding information by developers. There is a continuous effort to ensure these projects continue with the process of Authorisation.

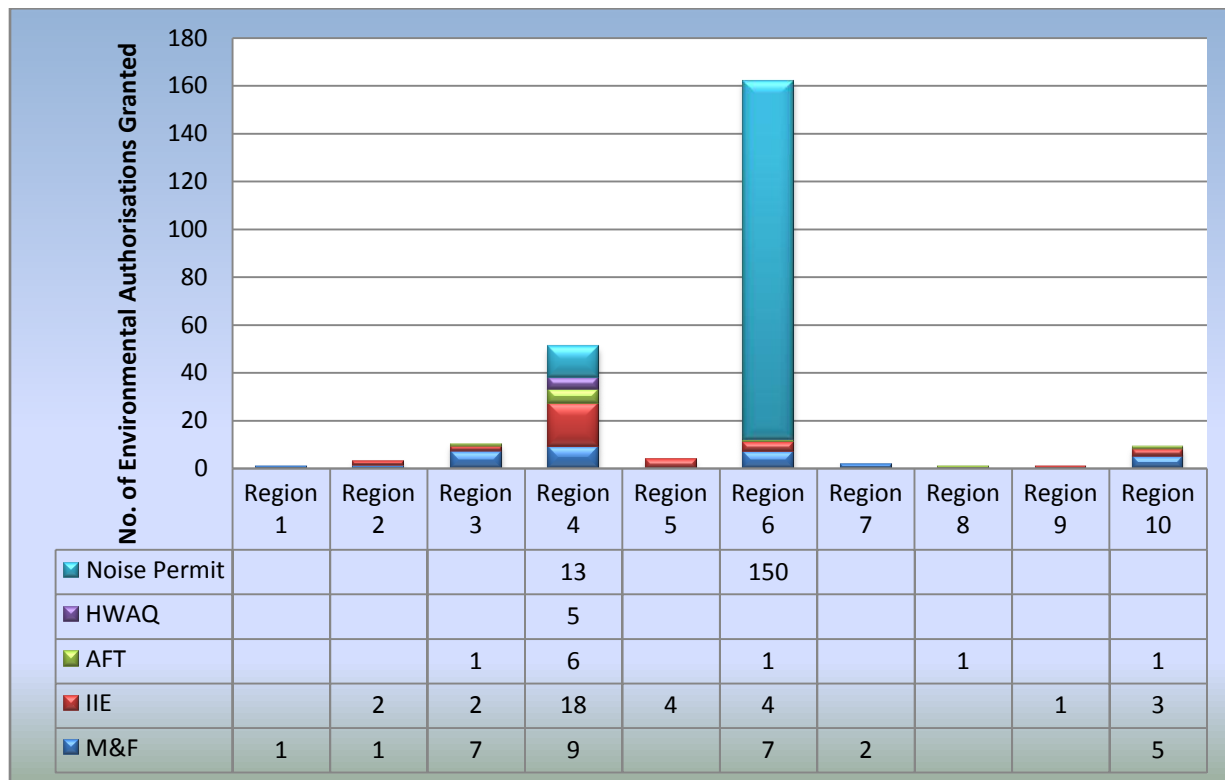


FIGURE 6: ENVIRONMENTAL AUTHORISATION GRANTED IN 2013 BY SECTOR AND REGION.

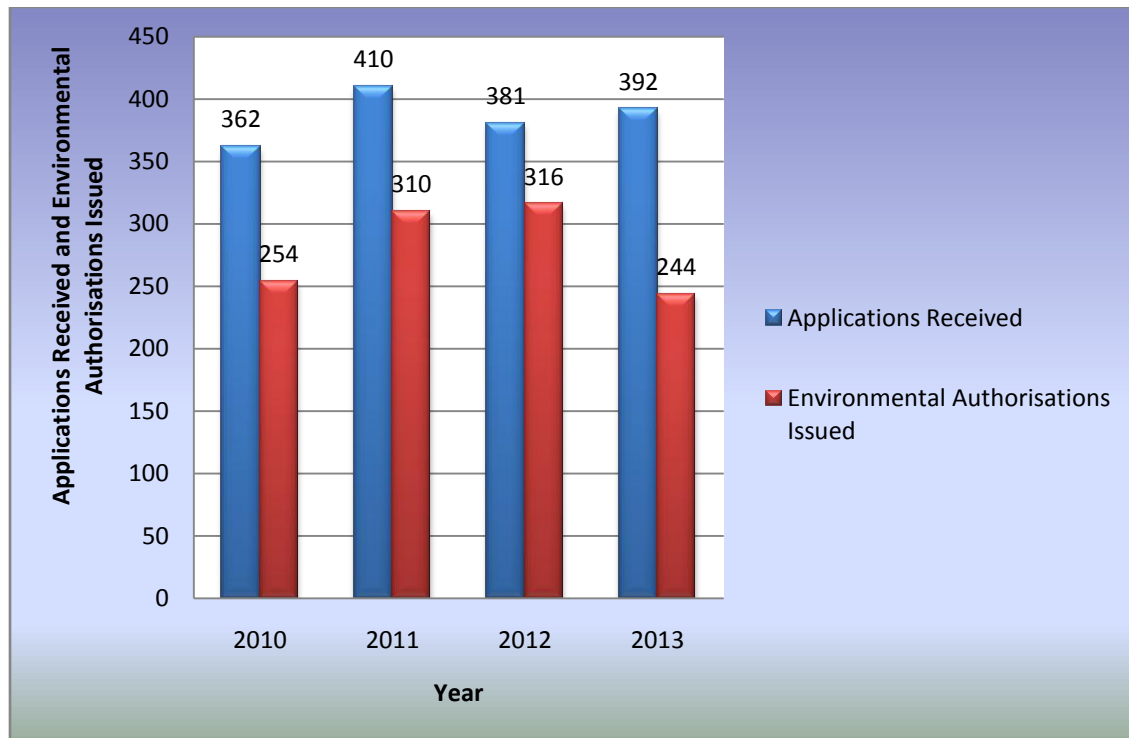


FIGURE 7: APPLICATIONS RECEIVED AND ENVIRONMENTAL AUTHORISATIONS ISSUED DURING 2010-2013.

## 2.2 HAZARDOUS WASTE/MATERIAL & AIR QUALITY MANAGEMENT

The Hazardous Wastes/Materials and Air Quality Unit was established in early 2011 and continued to direct its attention to activities aimed at strengthening its the capacity to effectively implement the Environmental Protection (Hazardous Wastes) Regulations, 2000.

### 2.2.1 Hazardous Wastes/Materials

#### Research and Development

- Development of Environmental Guidelines: The following draft guidelines were developed for the environmentally-sound management of:
  - Compact Fluorescent Lamps;
  - Mercury Contaminated Waste; and
  - Electronic Wastes.

- Proposal Development: A proposal for Treatment Options for Waste Oil was developed.
- Development of supporting documents: The following documents were developed to support the 2013 Workplan:
  - Hazardous Wastes database format; and
  - Permit conditions for Scrap Metal Operations.
- Public Awareness: a draft Press Release was prepared to notify the public of the EPA's requirements related to the exportation of Used Lead Acid Batteries (ULAB). Additionally, consultations and meetings were conducted with different private and government Agencies to inform and promote awareness regarding the role they play or should play in relation to hazardous wastes management.

### **Projects**

A number of applications for projects requiring environmental authorization was processed and is still being processed. During 2013, twelve (12) applications from prior years continued to be processed, while eight (8) applications were received in 2013. Of these, seven (7) environmental authorisations were issued during 2013.

### **2.2.2 Air Quality**

Activities continued to be implemented towards strengthening the implementation of the Environmental Protection (Air Quality) Regulations, 2000. These included research and development, development of supporting mechanisms and documents, and collaboration activities.

### **Research and Development**

- A Particulate Matter Air Quality Monitoring Protocol was developed for Kissoon Dyal Rice Mill, Chelsea Park, Mahaica, ECD.
- An Air Quality Monitoring Protocol for Linden was developed.
- An Air Quality Needs Assessment Proposal was developed.

### **Development of Supporting Mechanisms/Document**

- An Air Quality database was developed to standardize the input of air quality data towards the setting of air quality parameter limits.
- An Environmental Guideline titled: “Implementation of the Environmental Protection (Air Quality) Regulations, 2000” was developed.

### **Monitoring**

- A Particulate Matter Air Quality Monitoring exercise was conducted for Kisson Dyal Rice Mill of Chelsea Park, Mahaica, ECD.
- A Particulate Matter Air Quality Monitoring exercise was conducted for the University of Guyana.
- A Particulate Matter Air Quality Monitoring protocol was developed for BOSAI Bauxite Plant.
- The Unit assisted in the collection of Air Quality Data for the Sheriff/Mandela Road Expansion Project.

### **Collaboration**

The Agency sent out requests to GGMC, for assistance in the development of environmental guidelines for the management of mercury contaminated sites, and to IAST, and Bosai Bauxite Plant for the development of treatment options for waste oil.

## **2.3 RESEARCH AND DEVELOPMENT**

In exercising its functions, the EPA is mandated under Section (4) of the EP Act, 1996, to continuously formulate policy recommendations and plans in the furtherance of its functions, standards and guidelines to be observed for the improvement and maintenance of the quality of the environment, and to conduct, promote and coordinate research in relation to any aspect of pollution or prevention. Research and Development continued to provide necessary support to the work of the Division and the Agency.

## Guidelines, Standards and Code of Practice

In collaboration with the GNBS and other relevant sector agencies, the EPA continued to develop Standards, Guidelines and Codes of Practice. The primary purpose of these instruments is to provide sound, practical guidance to achieve good environmental management. The following was done in this area:

- Standards Development: During the year, the Technical Committee on Environment started to review and amend the Specification for Labeling of Commodities and Labeling of Equipment, Items and Parts containing Refrigerants.
- Conformity Assessment: The Agency continued to support the GNBS with the development of the National Conformity Assessment System through the National Committee on Conformity Assessment. The Agency worked towards the implementation of the ISO 17020 Standard for Inspection bodies. A Gap Analysis was conducted by GNBS, an Action Plan was developed, and an Internal Committee was established to pursue the activities of the Action Plan; 70 percent of the activities were successfully concluded.
- Environmental Guidelines: The Environmental Guidelines for Poultry Rearing Operations and the Revised Environmental Guidelines for the Preparation of Environmental Management Plans (EMP) were finalized and approved by the EPA Board in March 2013. Further, Environmental Guidelines for Landfills and Aquaculture were drafted. The Agency is currently seeking support from the Ministry of Agriculture - Fisheries Department - to further advance the Aquaculture Guidelines.
- Revision of Tools to support the Environmental Authorisation Programme: The following tools were revised and approved and implemented during 2013:
  - Revised Applications for Environmental Authorisation (New Projects and Existing Projects).
  - Revised checklist for documents required to proceed with the Authorisations Process.
  - Review of List of Projects Requiring Environmental Authorisation.
- Fee Criteria Revision: The review of the Fee Criteria for New Projects was finalized and approved by the EPA Board in March 2013. The review of the Fee Criteria for Existing Project was started; several consultation meetings were conducted during 2013 and a draft format was prepared and to be tested.

## **Proposal Development: Establishment of Water Quality Unit within the EPA**

A proposal for the Establishment of a Water Quality Unit within the Agency was developed and submitted to MNRE for endorsement.

### **2.5.2 Projects**

- *Development of Compliance and Enforcement Regulations:* The Environmental Protection Agency and the World Wildlife Fund signed an agreement on August 20, 2013, for the development of the Environmental Protection Enforcement and Compliance Regulations. A Consultant was hired and is currently developing the Environmental Enforcement and Compliance Regulations; this is expected to be completed by December 2014.

### 3. ENVIRONMENTAL MANAGEMENT COMPLIANCE AND ENFORCEMENT

The Environmental Management Compliance and Enforcement Division (EMCD) was established and became functional in August, 2013. The Division comprises four units: Research and Development (R&D), Integrated Coastal Zone Management (ICZM), Compliance, and Enforcement. Currently, ICZM activities fall within the ambit of R&D. Since its establishment, the Division jointly coordinated the implementation of the Litter Prevention Regulations with the Pick-it-Up Campaign under the MNRE. Figure 8 depicts the EMCD's organizational structure and cross-cutting areas and coordination with Environmental Management Permitting Division (EMPD).

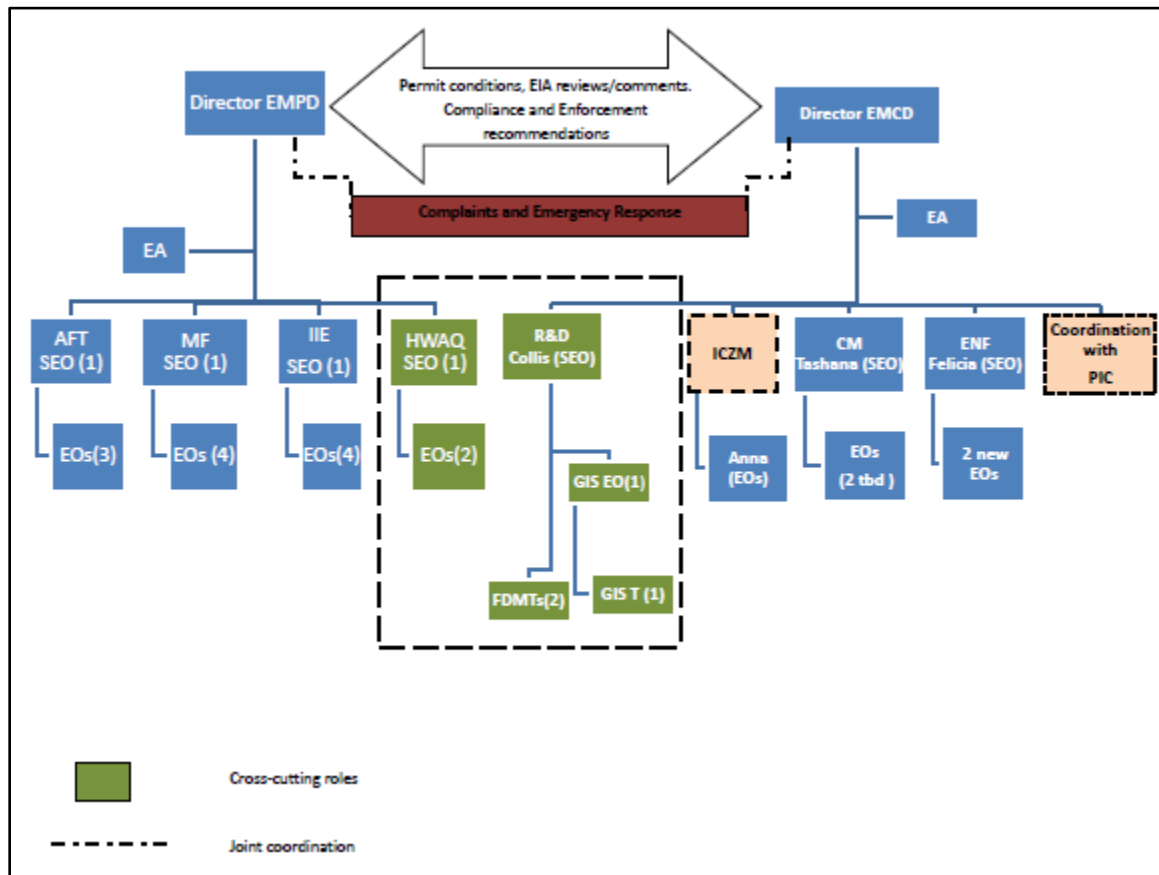


FIGURE 8: ORGANOGAM OF THE ENVIRONMENTAL MANAGEMENT COMPLIANCE AND ENFORCEMENT, AND THE ENVIRONMENTAL MANAGEMENT PERMITTING DIVISIONS.

### 3.1 COMPLAINTS MANAGEMENT

Two hundred and sixty-six (266) pollution reports (complaint cases) were received for 2013. These concerned dust, noise and fumes primarily from furniture manufacturing, operation of generators, spray painting activities, and livestock rearing activities (Figure 9). In 2013, the first and last quarter recorded the highest number of pollution reports. The majority of these complaints were along the East Coast of Demerara, Georgetown, and the East and West Banks of Demerara (Figure 10). Figure 14 compares complaints management between 2012 and 2013, highlighting an eighteen percent (18 %) decrease in complaints received in 2013 compared to 2012. One hundred and twenty-four (124) of these complaint cases were investigated in 2013 which resulted in forty-four (44) being closed (Figure 11).

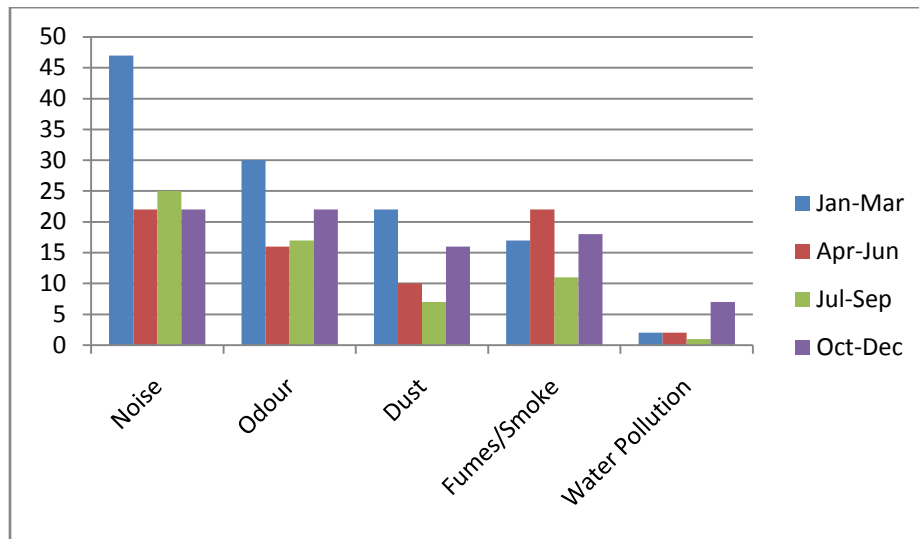


FIGURE 9: OVERVIEW OF TYPES OF POLLUTION REPORTS RECEIVED IN 2013.



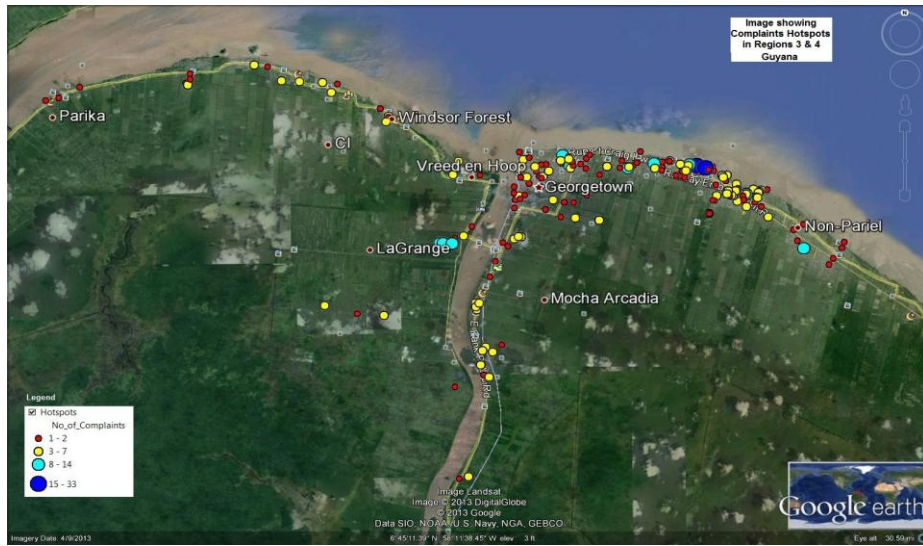


FIGURE 10: LOCATION OF POLLUTION REPORTS.

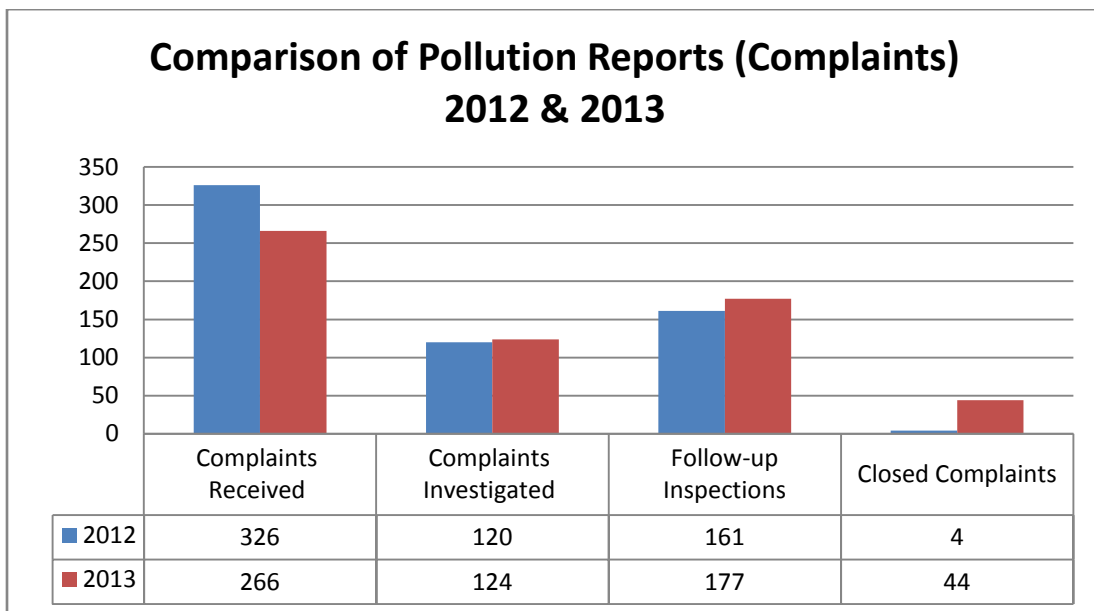


FIGURE 11: NUMBER OF COMPLAINTS RECEIVED, INVESTIGATED AND CLOSED DURING 2012 AND 2013.

## 3.2 COMPLIANCE

### Compliance inspections

111 Compliance Inspections were conducted during 2013 (Figure 12). There was an 18% increase in compliance inspections over that of 2012 (Figure. 13). The Agency has begun to focus its compliance monitoring based upon risks hence, during the latter part of the year, the majority of the inspections focused on noise and waste management permit conditions for Sawmills and Lumberyards. Operations were generally found to be compliant with these conditions.

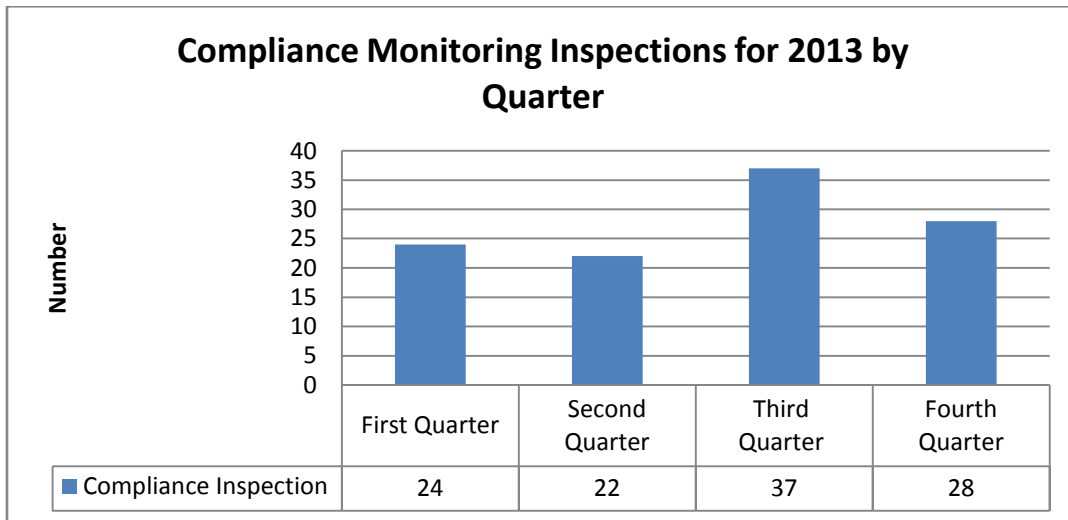


FIGURE 12: COMPLIANCE MONITORING INSPECTIONS BY QUARTER.

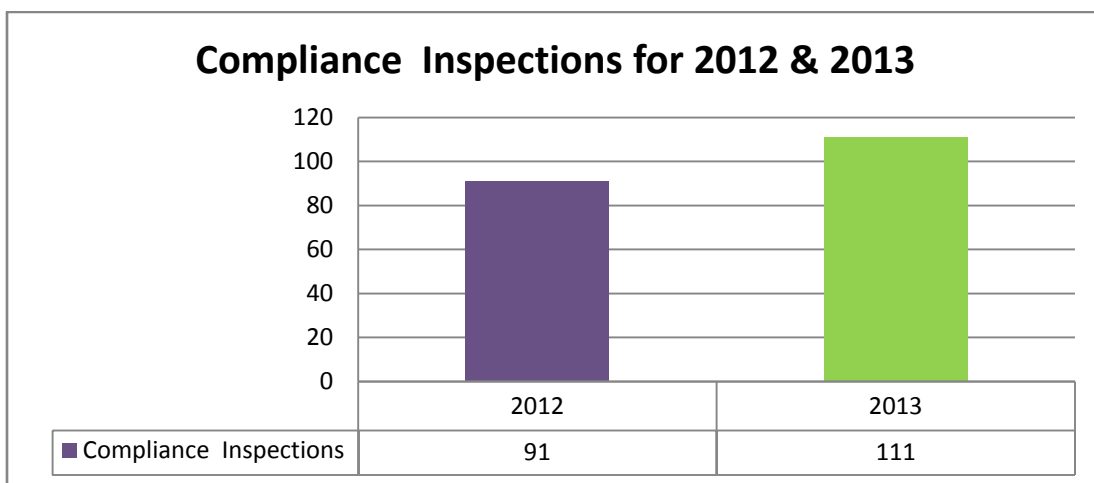


FIGURE 13: NUMBER OF COMPLIANCE INSPECTIONS FOR 2012-2103.

## **Compliance Monitoring**

The Agency has been actively engaged in monitoring several large-scale developments to mitigate the effects of environmental pollution, namely, Bosai Minerals (Guyana) Inc., Haags Bosch Sanitary Landfill, and Ricemills in the Mahaica, and Dryshore, Essequibo, areas.

Air quality around the Bosai Minerals (Guyana) Inc. operations at Linden significantly improved in August, 2013, with the installation of the dust collection system for Kilns 13 and 14. The environmental nuisances associated with the Rice Mills were primarily noise, dust and smoke. Burning of rice husk and inadequate dust management were the primary issues. Air quality monitoring was conducted in the Mahaica area, during latter part of the year to determine ambient particulate matter concentration during the non-milling season. Particulate matter concentrations were found to be below the WHO and USEPA emission standards.

## **Compliance Assistance**

The Agency has begun providing compliance assistance through technical guidance and advice to permitted projects and other industrial and development activities during the latter part of the year. These included providing guidance on waste separation, composting, and reuse by crop farmers and final disposal of waste to poultry producers and butchers of the Hydronie / Farm NDC. Community meetings were facilitated by the Agency to assist Rice Millers in Mahaica, Dry Shore, Essequibo, and a pre-cast concrete manufacturing operation in Bushy Park, Parika, to discuss with affected residents the issues affecting them and agree on measures to reduce the impacts. The Agency has been providing advice and monitoring the implementation of the measures to ensure that they are implemented correctly.

## **Enforcement**

### ***Prohibition Notices and injunctions***

Fifteen (15) Prohibition Notices were issued in 2013, the majority of them to spray painting and furniture operations along the East Coast of Demerara. Ten (10) Injunctions were served, most of them on the East Coast of Demerara (Figure 14). Three (3) of the injunctions issued were adhered to/resolved.

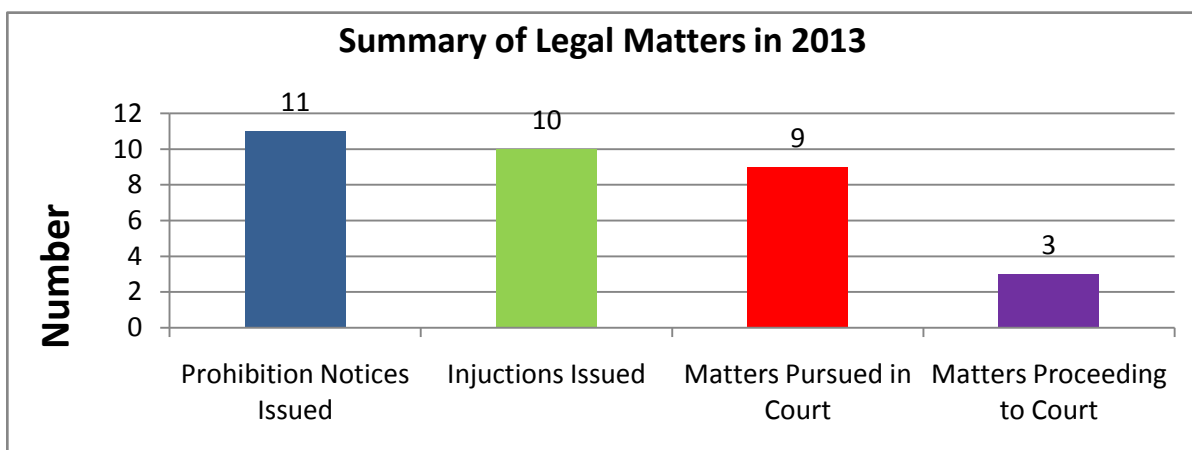


FIGURE 14: SUMMARY OF LEGAL MATTERS IN 2013.

### ***Litter Prevention Regulations***

The Environmental Protection (Litter Prevention Regulations, 2013) was completed in November 2013. This along with the Environmental Protection (Wildlife Management and Conservation Regulations, 2009) were Gazetted on the November 16, 2013.

## 3.3. CROSS-SECTORAL PROGRAMMES

### ***Integrated Coastal Zone Management (ICZM)***

#### ***Coastal Resource Map***

The GIS and the ICZM Units commenced the joint development of a Coastal Resource Map for Guyana. To-date, topographic scans of Guyana's Coast have been received from the Guyana Lands and Survey Commission; Turtle Nesting Sites from Guyana Marine Turtle Conservation Society; Mangrove areas from the Guyana Forestry Commission; and 5m Rapid EYE satellite imagery from the Guyana Forestry Commission. This covered the entire Guyana and will be used by the Agency in 2014 to obtain land use change over time.

#### ***Reviving the Integrated Coastal Zone Management Programme (ICZM)***

The Agency has begun the process of reviving its ICZM programme in 2013. Soliciting voluntary participation for the Advisory Committee through representatives from regional and national institutions; drafting of TOR for the Advisory Committee; and, a review of the ICZM Action Plan were successfully completed. These efforts continue to be supported by Public Education and Awareness activities, which included coastal cleanup initiatives in the Berbice area; and,

presentations to 17 (primary and secondary) schools on the importance of the coast and marine debris impacts on marine life.

## 4. NATURAL RESOURCES MANAGEMENT

Under the EP Act (1996), the EPA is mandated to coordinate and maintain a programme for the conservation and sustainable use of biological diversity in Guyana. Also, as the national focal point for the Convention on Biological Diversity (CBD), the Agency is required to design, source funding for, execute and implement projects to assist in achieving the general objectives and programmes of the Convention.

The objectives towards sustainable use and conservation of biodiversity are implemented under the Agency's Natural Resources Management (NRM) Programme which is organized into three components namely: Protected Areas, Biodiversity, and Wildlife.

In early 2013, Senior Environmental Officers (SEOs) were appointed for each component of the NRM Programme; additionally, an Environmental Officer was recruited for Protected Areas. For most of the year, the NRM Programme was being implemented by three SEOs, three EO(II)s and two EO(I)s. The EOI attached to the Wildlife Component of the Programme was promoted to EO (II) in the final quarter of 2013, and two of the SEOs have resigned.

At the end of 2013, the work of the NRM Programme was being executed by one (1) SEO, four EO(II)s and one EOI.

### 4.1 PROTECTED AREAS

#### **Implementation of Phase II of GPAS**

In September, 2009, the Governments of Guyana and Germany, represented by the KfW Entwicklungsbank (the German Development Bank) signed a financing and project agreement for the provision of EUR 5 M to support Phase II of the Guyana Protected Areas System (GPAS) - Conservation of Tropical Forests Project.

Through a Separate Agreement signed in December, 2011, the project financing and design were finalised. EUR 1M (Tranche I) was earmarked to finance small-grant project activities which include infrastructure measures for GPAS and the Protected Areas Commission as well as payment for consultancy services, while EUR 4 M (Tranche II) was provided to support a sustainable and long-term financing mechanism for the National Protected Areas System.

Phase II was designed to build on activities and outcomes of the first phase of the GPAS Project and has the overall objective to ensure the sustainable operation and management of the National Protected Area System through:

- Development of a management plan for the Shell Beach Protected Area;

- Infrastructure development and procurement of equipment for Kaieteur National Park;
- Refurbishment of a building to house the Protected Areas Commission;
- Procurement of equipment for the Protected Area Commission; and
- Consulting Services, and Monitoring.

Additionally, the remaining funds from GPAS Phase I will be utilised to provide follow-up support to the GPAS Phase I Small Grants Sub-projects.

**Disbursement of Funds** - Two disbursements in the sums of EUR 173,770.54 and EUR 101,797.3 were received this year for the GPAS II. These were made against expenditure forecasts presented during the reporting period which were submitted to the KfW during the year.

**KfW Appraisal Mission** - KfW, Germany and GFA Consulting Group conducted a Mission to Guyana during the period June 24 - July 02, 2013. Meetings were held with the EPA, PAC, CI-G and MNRE to discuss the activities under the various phases of the GPAS Project. It was agreed that the GPAS Phase II completion date would be extended to December 2014. An *Aide Memoire* was signed at the end of the mission, renewing commitments under the various phases of the project.

**Operational and Financial Plan** – The Operational and Financial Plan was revised in October 2013, to support activities during the Project’s extended Phase. Based on discussions with KfW held in December 2013, the Plan will be further revised to include the proposed infrastructure development at Kaieteur National Park.

**GFA Consultancy Contract** - The Proposal and amendment II to Contract submitted by GFA Consulting Group for Consultancy Services to be provided under the Project was reviewed by the EPA, approved by MNRE and submitted to KfW for no-objection in November, 2013. This amendment was necessary in order to facilitate consultancy services during the extended phase of the GPAS II project. The GFA continued to offer support in the areas of proposal development and general project management. The third, fourth and fifth interim payments were made to GFA.

**Sub Project Implementation:**

**(a) Management Planning Project for Shell Beach** – The proposal inclusive of budget for the Management Plan Process was developed and submitted to KfW, Germany, for approval in October, 2013. A pre-management planning consultation was conducted in collaboration with the Protected Area Commission (PAC), during the period August 29-30, 2013, with the communities of the Shell Beach Protected Area. The consultation was aimed at raising

awareness and building capacity of communities on the National Protected Area System in Guyana; introduce the function of the PAC and provide an update on the status of the Shell Beach Protected Area. The consultation was pre-financed under the GPAS II Project and was later reimbursed by the PAC in November, 2013.

**(b) Tukeit Guest House and Warden's/Caretakers Building** – The contract for the construction and supervision component of the project was awarded to Yusuf General Contracting and Innovative Engineering Consultancy Services, respectively. Adverse conditions in the Region resulted in the sub-project commencing in January, 2013. Based upon the discussions held during the PAC Board Meeting in December, 2012, the project was granted a permit from the GFC for the sourcing wooden material in the region. Several meetings and monitoring visits were conducted with the Contractor in order to promote the completion of activities under the project. The Contractor encountered difficulties in the transportation of materials to the project site. Two extensions were granted in May 23 and July 23, 2013, in order to facilitate construction activities. On October 09, 2013, the contract with Yusuf General Contracting was terminated due to lack of performance in the completion of the project. In November 2013, the Agency submitted a claim to the insurance company, Assuria General Inc., in order to recover funds to the project from the mobilization and performance bonds.

NPTAB was engaged for the award of contract to the second most responsive bid during the tendering process. NPTAB granted approval for the award of contract to Alvin Chowramootoo Construction and Block Making on December 31, 2013. The contract with the new contractor will be signed in January, 2014. At the end of the reporting period, the construction works for the Tukeit buildings are approximately forty percent (40%) completed.

**(c) Building for the Protected Areas Commission** – Bids for the Construction of the PAC Head Office was opened in January, 2013. Five (5) bids were initially received through open tendering for the construction component of the project. However, based upon the Donor's recommendation, the open tendering process for the construction component was annulled. Re-tendering was done using selective tendering and a total of three (3) bids were opened at National Procurement and Tender Administration Board (NPTAB) in April, 2013. The bids were assessed and the evaluation report was submitted to NPTAB for approval. The contracts for the construction and supervision components of the sub-project were awarded to Satar Mohamed & Sons Construction & Hardware Supplies and Innovative Engineering and Consultancy Services, respectively, in August, 2013. At the end of the reporting period, the construction works for the building are approximately seventy five (75%) completed. The building project is expected to be completed by the March, 2014.



**(d) Equipment and Furnishing for the PAC** - The PAC procured office equipment and furniture for the functioning of its offices with assistance from the EPA. These included computers, desks, chairs, printers, and a PBX phone system. All payments were made directly to the suppliers by the EPA, in accordance with an agreement made between the EPA/GFA and the PAC.

Bids for the procurement of two vehicles for the PAC were opened in January, 2013. Following the evaluation process, the contract for the procurement of the vehicles was awarded to Beharry Automotive Limited in May, 2013. The vehicles were handed over to the PAC at a short ceremony attended by the GFA Consulting Group, KfW, and the MNRE in June, 2013.

**(e) Follow-up Support to GPAS I Community Based Sub-Projects and Baseline Study** - It was agreed previously that the unspent funds from GPAS Phase I would be used to support follow-up interventions in Amerindian communities and the collection of data which will help to determine the effectiveness of the projects implemented in Phase I.

Advertisements for the two consultancies were published and applications were received. However, based on the recommendations from the GFA Consulting Group, a decision was made for two consultancies to be conducted by a team of three (3) consultants, Ms. Parmeshwarie Pitamber; Mr. Robert Spitzer; and, Mr. Michael Martin. The team would collect data on follow-up measures and baseline study, in the communities of the GPAS Phase I Sub-projects in the Shell Beach and Kanuku Mountains Protected Area. Data collection for the two consultancies was concluded in May, 2013, and draft reports were compiled and submitted to the Agency for review. Following the revision of these Draft Reports, the Final Report for the Follow-up and Baseline Study was submitted to KfW in September, 2013.

**(f) Utilisation of the GPAS I unspent Funds** - The proposal for the utilization of the unspent funds was submitted to KfW in September, 2013; a proposal for the utilisation of the remaining EUR 85,000 of unspent funds to support infrastructure development at Kaieteur was also submitted for consideration. The proposals, 'in principle', were approved by KfW.

Based upon the *Aide Memoire* signed in July, 2013, it was agreed that the GFA Consulting Group would administer the follow-up measures within the communities of the GPAS I sub-projects. Follow-up measures identified were the procurement of photovoltaic systems, extension of the water trestles and procurement of a cassava grating mill. At the end of the reporting period, the photovoltaic system at the Kamwatta and Warapoka multi-purpose buildings were procured and installed, and the cassava grating mill was procured for the Assakata Village. The construction works for the extension of the water trestle were approximately seventy percent (70%) completed.

In relation to the infrastructure development of a staff living quarters at Kaieteur, Innovative Engineering Consultancy Services were contracted by the GFA Consulting Group to develop the tender document including the design and bill of quantities for the competitive tendering of the project. The project is expected to be tendered in February, 2014.

**National Protected Area Trust Fund** – Mr. Ralph Ramkarran was contracted under the GFA Consulting Group to provide a legal opinion and advice on the issues (and potential issues) regarding the Protected Area Act (2011). Based upon up the legal opinion received, a lawyer was contracted through the GFA Consulting Group to draft Regulations under the Protected Area Act (2011), in order to establish a Board of Trustees. The Regulations were completed and submitted to MNRE for Cabinet’s no-objection.

### ***Implementation of Phase III of GPAS***

Phase III of the GPAS Project is expected to commence in 2015, upon the completion of the activities under Phase II of the GPAS project.

### ***Capacity Building***

The SEO, Protected Areas, attended the GEF Expanded Caribbean Constituency Workshop, in Dominican Republic in July, 2013; a report on the workshop was prepared. Environmental Officers (Protected Areas) participated in natural resources and environmental economics, and land resource management training courses facilitated by the School of Earth and Environmental Sciences.

### ***Other Activities***

**Protected Area GAP Analysis** – Staff participated in a workshop organised by the Protected Areas Commission in December, 2013. The workshop sought to highlight gaps in the systematic planning tool used to identify conservation zones within a range of spatial economic parameters.

**Protected Areas Capacity Building** – An outreach was conducted at Chenapau Village, Region 8, during February 28 to March 02, 2012; there, a presentation on activities undertaken in GPAS Phase I was delivered. The outreach team also included representatives from the Ministry of Amerindian Affairs, PAC and WWF-Guyana.

**Ramsar Mission** – The Unit prepared a list of wetland sites in Guyana for the MNRE who facilitated a RAMSAR Secretariat visit during May, 2013. The SEO participated in field visit with PAC, NDIA, WWF and Ramsar Secretariat Officials to the East Demerara Water Conservancy and

the Victoria Mangrove Site. The purpose of the visit was to become familiar with some of the characteristics of these wetland sites.

**Board of Directors and Meetings of the PAC** – The SEO participated as secretary of the Board of Directors for the PAC. The Agency provides the Board with monthly reports on the status of the GPAS Project.

**Conservation Trust Fund** – The SEO (Protected Areas) represented the Agency on the Board of Trustees for the Conservation Trust Fund.

## 4.2 SUSTAINABLE USE OF BIODIVERSITY

This component of the NRM Programme is responsible for the processing of Research Applications; the issuance of Permits to conduct research in Guyana; and the export of biological specimens from Guyana. It is also responsible for the coordination, execution and implementation of Projects and Programmes for the Sustainable Use and Conservation of Biodiversity in Guyana.

### 4.2.1 Biodiversity Research

During 2013, applications were received from students, professionals, and institutions worldwide including Raw Television, U.K; University of Kent, U.K; Royal Holloway, University of London, U.K.; University of Surrey, U.K.; University of Florida, U.S.A., Angela State University, U.S.A, Humboldt State University, U.S.A., University Gottingen, Germany, and World Wildlife Fund, Guyana (WWF-G).

The majority of the Research Projects were concentrated in the interior locations of the country, in areas such as, the Iwokrama Rainforest; Madhia; Rupununi; and, Regions 8 and 9.

#### ***Research Applications***

For the period, Fifty-five (55) Research Applications were received (Figure 15).

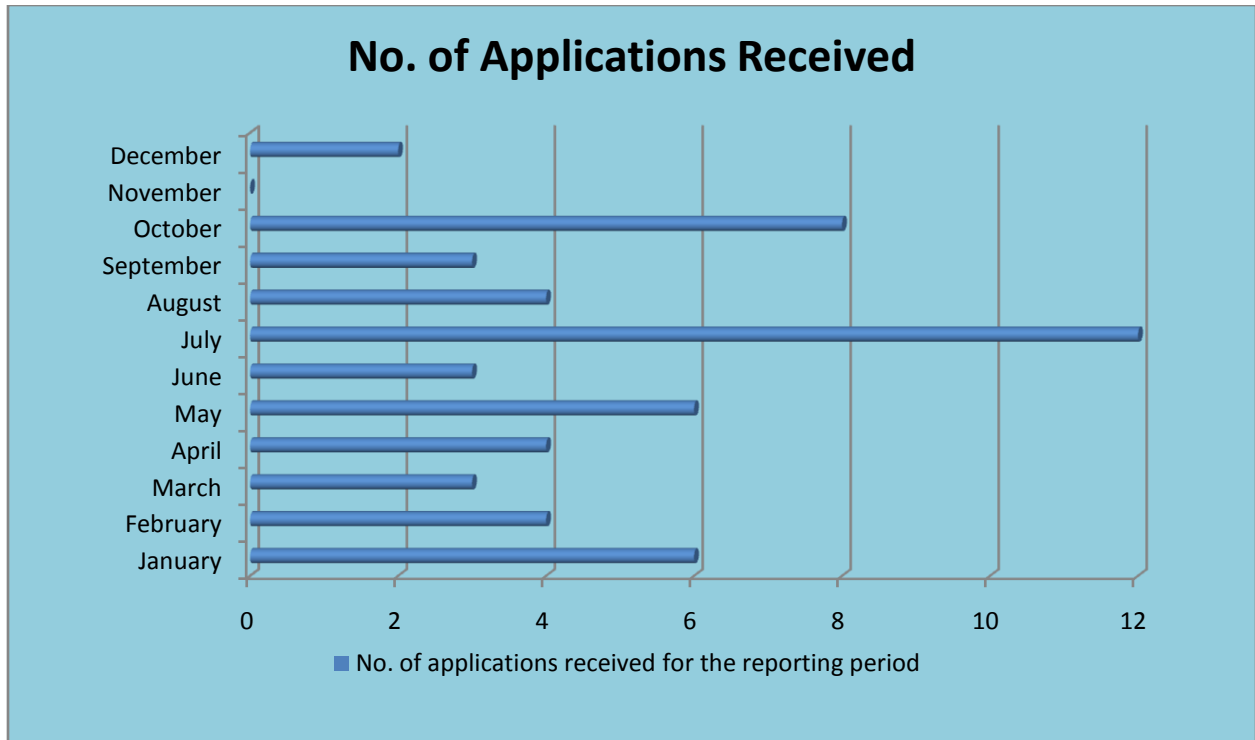


FIGURE 15: MONTHLY DISTRIBUTION OF APPLICATIONS RECEIVED IN 2013.

### ***Processing of Research Applications and Issuing of Permits***

Forty-eight (48) research applications were processed and approved; of these forty-six (46) were applications received in 2013 and two (2) were applications received in 2012.

Forty-five (45) Research Permits were issued for the reporting period, two (2) covering research applications that were received and processed in 2012 but approved in 2013. Fourteen (14) research permits were extended; eight (8) requests for the expansion of geographical scope; five (5) requests for the extension of the research period; and one (1) request for both the expansion of geographical scope and research period were granted (Figure 16). The Permits issued, were for research to be conducted on flora, fauna, filming, and other studies.

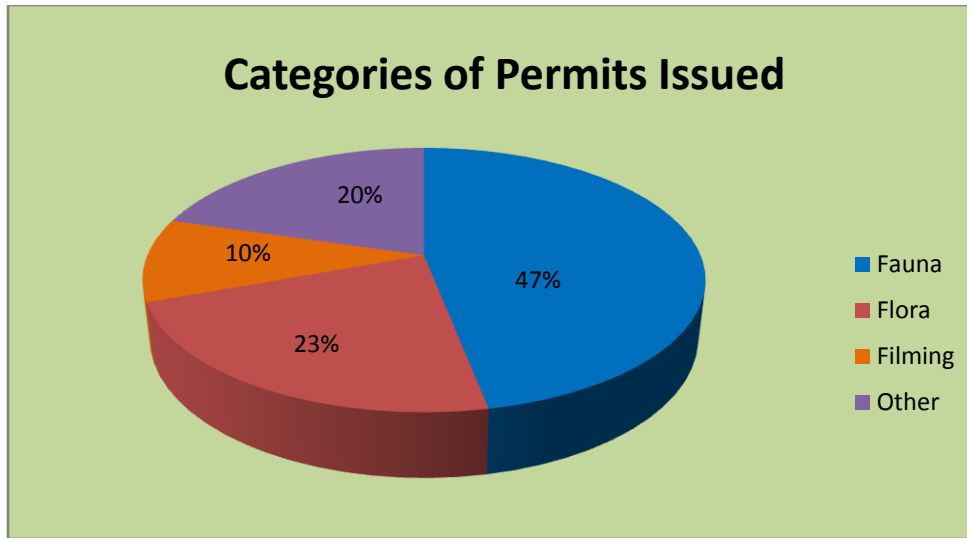


FIGURE 16: CATEGORIES OF APPLICATIONS PERMITTED IN 2013.

Of the fifty-five (55) applications received for the year, forty-five (45) or eighty two percent (82%) have been completely processed, approved, and issued with permit to conduct Research; eighteen percent (18%) of the applications received are at various stages of processing. During the period, two (2) applications were cancelled.

This year, there was an increase in research applications, when compared with last year. The highest number of applications (12) was received in July followed by eight (8) in October (Figure 17).

### Monitoring and Enforcement

The monitoring and enforcement aspect of the Research process has been maintained over the period by local counterparts from the University of Guyana, when possible. The Agency continued to maintain its linkages with other relevant sector-agencies and organizations such as the Ministry of Natural Resources and the Environment, the Ministry of Amerindian Affairs, the University of Guyana, Iwokrama International Centre for Rain Forest Conservation and Development, the Protected Areas Commission, the Guyana Forestry Commission and Local Communities in order to ensure researchers' adherence to the National Biodiversity Research Guidelines and the Terms and Conditions of their respective Research Permits. Follow-up continued to ensure that researchers fulfilled their reporting obligations as stipulated by their research permits prior to departing Guyana and the issuing of any export permits.

Additionally, during the review period, there were several cases where research was conducted without the prerequisite of a Research Permit from the Agency.

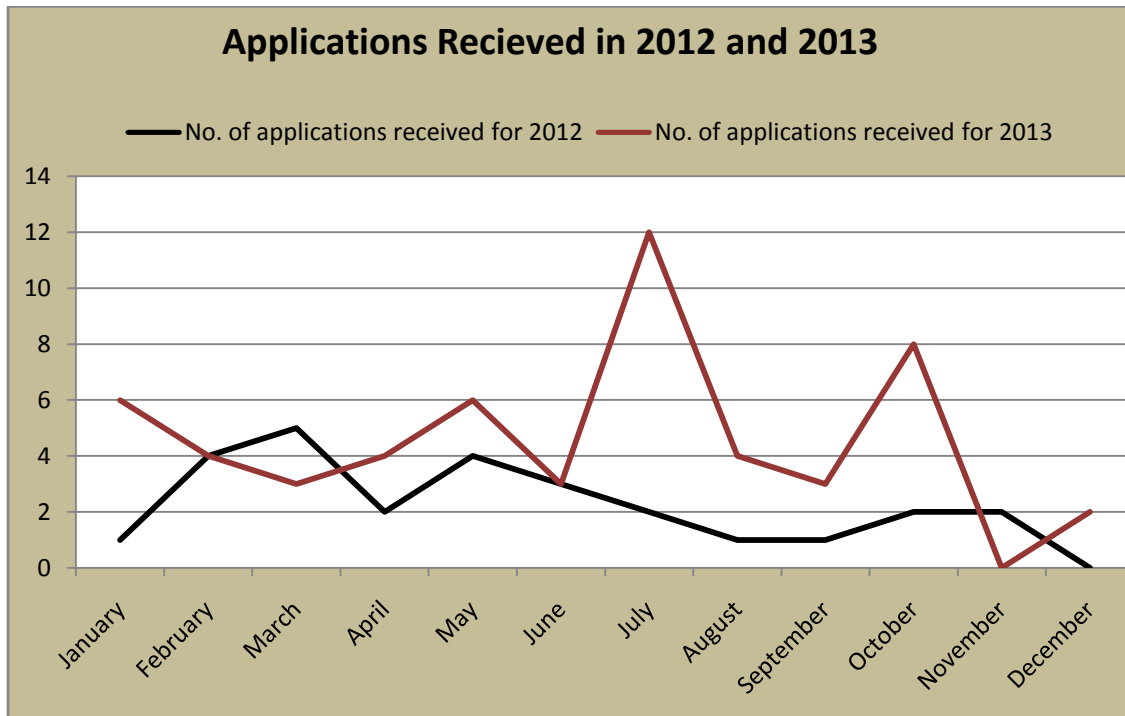


FIGURE 17: RESEARCH APPLICATIONS RECEIVED IN 2012 AND 2013.

### Revenue Generation

A total of fourteen thousand six hundred and thirty United States dollars (US\$14,630.00) was generated for the period from applications, late applications, and permit fees (this excludes permit fees for applications currently being processed, to be processed, and a in some instances application and late application fees).

#### 4.2.2 Biodiversity Projects

The following projects were executed to support the conservation and sustainable use of biodiversity in Guyana:

## ***Implementing National Biosafety Framework in the Caribbean Sub Region (Regional Biosafety Project)***

### Legal Framework for Biosafety

Consultations on the draft Policy on Biotechnology, Biosafety and Biosecurity were held in eight (8) of the country's Administrative Regions. Feedback from these consultations is currently being used to update the draft Policy; a Consultation report was also prepared.

Discussion were held on the first and second drafts of the Biosafety Bill with the Consultant following the submission of each draft; (4) associated Regulations under this Bill were also prepared and submitted for review.

### Institutional Framework

The Institutional Framework for the Management of Biosafety in Guyana was circulated to stakeholders for feedback and support. Letters, providing information on the current status of the Framework and the proposed role of the stakeholder organizations, were distributed to the National Agriculture Research and Extension Institute (NAREI), University of Guyana (UG), Guyana School of Agriculture (GSA), Institute of Applied Science and Technology (IAST), Guyana National Bureau of Standards (GNBS), Government Analyst – Food and Drug Administration, (GA- FDA) and Guyana Livestock and Development Authority (GLDA). Follow-up meetings were also held with all of the organizations except IAST.

### Public Awareness Strategy

The Project Management Unit (PMU) with collaboration from the BU met with the Education Ministry (NCERD office) and discussed possible areas in the school curriculum to introduce information about Biotechnology and Biosafety. It was discussed that the initial target groups would include students of Grades 7-9 and teachers. The following were proposed as initiatives to foster awareness of Biotechnology and Biosafety through Science Education: Provide input on Biotechnology/Biosafety Information to the Weekly Radio Broadcast – Talking about Education; Participation on the Learning Channel through hosting panel discussions (Video), preparation of a DVD on Biotechnology/Biosafety information and development of educational literature (Booklets) on Biotechnology and Biosafety in Guyana; Participation in Education Month (September 2013) Education Exposition and Facilitate Teacher Awareness Training in Biotechnology/Biosafety through scheduled Ministry of Education Workshops.

Additionally the Agency participated in a one-day public awareness activity contributing to the Ministry's programme. The Agency hosted a booth on Biosafety and GMOs, information on Guyana, and the EPA.

### Project Reporting

The annual workplan and budget, as well as expenditure report for the first, second and third quarters of 2013 were submitted to the Regional Project Office. Additionally, the NSC met four (4) times for the year to discuss all matters relating to the project.

### ***Regional Project on Access to Genetic Resources and Benefit Sharing***

The Unit received a correspondence from the ABS Regional Office for nominations to the workshop on Contract Negotiation on Access to Genetic Resources and Traditional Knowledge and the Second Regional Meeting of the GEF ABS LAC Project, which was held in La Habana, Cuba, from March 18 to 22, 2013. One officer attended the Meeting. The main focus of the workshop was the review of the key elements of ABS in the framework of the CBD and the Nagoya Protocol; to review the situation of ABS Regimes in each of the participating countries, focusing on the main elements of each system, advantages, complexities and implementation of the Nagoya Protocol at national level.

Additionally, the Unit was invited to a meeting with the GIZ representative, Dr. Hartmut, the Protected Areas Commission, and the MNRE, to discuss focal areas in which the GIZ can offer assistance. The meeting focused on ABS as it relates to Guyana, and possible integration with Protected Areas Systems. Following this meeting, Dr. Hartmut was given a demonstration of NBRIS; it was indicated that there is an opportunity for NBRIS to be used as a model for other countries.

Further, using Skype, a meeting was held with Ms. Maria Amparo Ricaurte from IUCN-SUR, to provide an update on the national implementation of the project for its mid-term review; this was subsequently submitted for comments; it was reviewed and comments were submitted comments to the Regional Office.

The Co-financing report for the period July 2011 - December 2012 and the Expenditure Statement for the period January 2011 - July 2013 were prepared and submitted to the Regional Office.

The Agency received a questionnaire from the Regional Office on the national coordination of ABS and Traditional Knowledge, which was subsequently filled and submitted. Additionally, numerical information was provided to the Regional Office on the number of Research Permits issued for the period 2011-2013.

The Agency submitted a correspondence to the Regional Office proposing an activity to use the remaining funds under the project (USD 2, 114). Subsequently, the MNRE approved the ToR for



the review and finalization of the draft ABS Regulations and also for the sole sourcing of a Consultant for this activity. The Consultant was identified and work is to commence shortly.

### ***National Biodiversity Research Information System (NBRIS)***

The NBRIS became operational in August, 2013; thus far, seventeen (17) research applications were received through this system. However, an error occurred during the synchronization of the WEB and LAN Modules; this was subsequently rectified by the Consultant.

The IT Unit created a new menu on the EPA's website for the link to the NBRIS; this was also uploaded to the National Clearing House Mechanism (CHM).

### ***Support to Guyana for the Revision of the NBSAPs and Development of Fifth National Report to the CBD***

#### Project Unit

The Project Assistant was hired and commenced in August, 2013. Also, the following reports were prepared and submitted to UNEP:

- Half-year progress reports for the periods July to December 2012 and January to June 2013.
- Expenditure Statements for the period July 2012 to June 2013.
- Co-financing Reports for the period July 2012 to June 2013.
- Inventory of Assets.

#### Hiring of Consultant

Further to the first call for interested consultants to submit technical and financial proposals for the Revision of the NBSAP and Preparation of the Fifth National Report, the following ensued:

- It was recommended that the Agency re-advertise due to non-competitiveness.
- After re-advertising, a suitable applicant was selected but the financial proposal had to be negotiated to better suit the available project funds. A letter was sent to the MNRE identifying the successful candidate with a request that they be exempted from paying VAT and subsequent approval to proceed with the formal signing of a contract. The waiver of VAT was subsequently granted by the MNRE.

#### Participation in Regional Workshop

The Project Manager and the SEO attended the Regional Workshops for the Preparation of the 5NR and Clearing House Mechanisms respectively, which were held in September, 2013 in St. Lucia. The purpose of the workshop was "to strengthen capacities of the countries in the region

for preparing their fifth national reports and for developing their national clearing-house mechanisms”.

### **ACTO-Amazon Regional Observatory**

The Agency received a correspondence from the Ministry of Foreign Affairs requesting a nomination to attend the 1<sup>st</sup> meeting of the Special Working Group on the Amazon Regional Observatory. Approval was granted for one officer to attend the meeting, held in Quito, Ecuador in June, 2013. A report on the meeting was prepared.

Additionally, the Agency is awaiting guidance from the MNRE on the nomination of a focal point for the Amazon Research Network Centre and on the way forward for the establishment of a National Research Network Centre.

### ***Mainstreaming Biodiversity Project***

Following discussions with the GEF Working Group and on the advice of the UNDP office, the Agency prepared a letter to the GEF Secretariat, requesting their endorsement to utilise the remaining GEF 5 STAR allocation for a Mid-Size Project (MSP) in relation to Mainstreaming Biodiversity into Mining. The necessary endorsement was received and the Project Information Form (PIF) was prepared and submitted; the PIF was approved by the GEF Secretariat.

Terms of Reference for a Consultant to prepare the project document was prepared and a Project Consultant was subsequently hired. Initial meetings were held with the project Consultant and UNDP to discuss the way forward. The Consultant is expected to visit Guyana in the third week in January 2014 and the project document is expected to be finalized by April 2014.

### **Country Support Programme**

The GEF National website has been launched and can be accessed at [www.gefguyana.org](http://www.gefguyana.org). The Division is currently compiling information on all past and current GEF funded projects to be uploaded to the website.

### **Small Grants Programme (SGP)**

The Agency participated in the review of twenty-five (25) project concepts and eight (8) project proposals submitted to the SGP. Three (3) project proposals were approved for funding. The Agency’s representative continues to give support to the SGP through attending National

Steering Committee meetings and providing technical review of projects, objectives, and progress of the SGP work in Guyana.

### 4.3 CONSERVATION AND SUSTAINABLE USE OF WILDLIFE

This component of the Natural Resources Management Programme is dedicated to the coordination, development, and maintenance of a programme and activities for the sustainable use and conservation of Wildlife in Guyana.

#### ***4.3.1 Wildlife Conservation and Management (WMC) Regulations***

In January, 2013, electronic copies of the Draft WMC Regulations and Explanatory Notes were provided to the Ministry of Natural Resources and the Environment (MNRE), Attorney General Chambers, and Ministry of Legal Affairs. The WMC Regulations were signed by the Minister of Natural Resources and the Environment on November 11, 2013, and was sent to the Office of the President where it was gazetted. A plan is currently being prepared for implementation of the WMC which has been integrated into the NRM Programme 2014 workplan.

#### ***4.3.2 Investigation of Reports of Illegal hunting in Iwokrama (Protected Area)***

A field visit was carried out during August, 2013, in response to official reports of poaching or illegal hunting within the Iwokrama protected area, particularly in the Burro-Burro River. A report was prepared and sent to the MNRE following which a meeting was conducted with representatives from the EPA, Iwokrama, Protected Areas Commission and the Wildlife Divisions to discuss the way forward.

The MNRE had officially written to the Ministry of Home Affairs to request and encourage its support on this matter (illegal hunting), particularly as it relates to firearm license and increasing both police ranks and patrols at Iwokrama to curb the occurrences of illegal hunting in the protected area.

As a result of persistent reports of illegal hunting in the area (the Burro-Burro River), a joint 'sting' operation was executed during December 11 to 15, 2013, through Iwokrama and with assistance from the MNRE. The team included representatives from the EPA, Ministry of Agriculture, Police Force and several Iwokrama Rangers. The objective was to apprehend the

individuals reported to have entered the Burro-Burro River for the purpose of fishing and hunting, with commercial intent.

On December 12, three (3) individuals were caught at the Powis Falls with 170 lbs of Labba and 30 lbs of Powis in their possession, housed in a small freezer. The individuals were taken, by the police rank present to the Iwokrama Field Station and then transported to the Lethem Police Station.

Iwokrama Centre was subsequently informed that the men had pleaded guilty to the charge of hunting illegally within a protected area and were required to pay a fine of G\$20,000 each.

#### ***4.3.3 Marine Turtle Symposium and Review of MoU***

Several meetings were held with WWF/GMTCS to discuss sharing of information and preparation for 11<sup>th</sup> Regional Symposium: Marine Turtle Conservation in the Guianas held in Suriname during October 29 to November 1, 2013. The EPA was not given approval to attend. Follow-up discussions are currently pending the renewal of MoUs for sharing of marine turtle data both local and with Suriname and French Guiana.

#### ***4.3.4 Projects being implemented by the NRMD***

Assistance continued to be provided as requested to the Biodiversity Projects being executed under the NRM Programme. Presently, the lead is being taken in coordinating the NBSAP Project and assistance is being given to the Biosafety Project and also the Research Permitting Process.

#### ***4.3.5 Inter-divisional collaboration***

There is continued collaboration with the EMPD, EMCD, and the EITD particularly in relation to field visits and review of issues related to the wildlife sector.

## 5. EDUCATION AWARENESS AND CAPACITY BUILDING

The promotion of public awareness and participation in protection, conservation and sustainable use of the environment is a key function of the EPA. This function is carried out primarily through the Education and Awareness and Capacity Building Programmes. While these Programmes are both cross-cutting, they are led by the Agency's Education, information and Training Division.

Public awareness and education programmes are planned and implemented with the goal of increasing understanding of environmental issues, thereby increasing participation in environmental decision-making at the individual and societal levels. In implementing these Programmes, the Agency provides information in a range of formats to varied segments of the population. Internally, there is collaboration among the Divisions responsible for implementing the Environmental Management Programme and the Natural Resources Management Programme. Key external alliances with a number of Sector Agencies, Government and Non-Governmental Organisations are invaluable for the delivery of these Programmes.

### 5.1 DEVELOPMENT OF EDUCATIONAL MATERIALS

In keeping with the needs and changing focus on environmental issues, new educational and informational materials continue to be developed. During the year, a number of relevant informational materials were developed on a range of topics to meet the needs of varied target groups. These materials were disseminated at various events and activities to groups and individuals in the country. Specifically, the following materials were developed.

#### **Booklets/Handouts/Flyers**

Twelve (12) booklets/handouts/flyers were prepared for distribution and training purposes during the year on subjects as follows:

- WED 2013 theme and the 3R's;
- International Coastal Cleanup 2013;
- Energy Workbook for Grade 4 students;
- Worksheet: Water and Biodiversity;
- Two Information sheets: Water and Biodiversity;

- Booklet – National Biosafety Policy;
- Facts Sheet for World Plant Day;
- Effective EE Tools and Methodologies;
- School Yard Ecology;
- EE: Infusion verses Diffusion;
- Approaches to Environmental Education; and
- EE Action Planning.

### **Brochures/Bookmarks**

Three (3) new bookmarks/brochures were created during the year:

- International year of water cooperation;
- World Plant Day; and
- WED 2013 theme.

### **Posters/Banners**

Three (3) new banners were created during the year:

- Banner highlighting major education and awareness activities of the Agency;
- Banner for the consultations on the National Biosafety Policy; and
- Banner for International Day for Biodiversity.

### **Green Leaf Newsletter**

The Division produced its usual quarterly electronic newsletter which highlighted environmental issues, Agency news, projections and achievements, among other topics in a timely manner.

### **Information/Activity Packages**

Several packages were prepared for schools and environmental clubs. Materials included in these packages were related to World Wetlands Day, World Water Day, International Day of Biodiversity, and World Environment Day, as well as general information on environmental issues.

### **Teaching Aids**

Twelve (12) teaching aids were prepared to enhance awareness outreach efforts during the year. These were:

- Career Tree;
- Water Whiz Quiz game;
- Forest Facts tree;
- Forest Trivia Game;
- Windows to Action;
- Environmental Trivia game;
- Water conservation tips leaflet and case studies;
- Collage on 'Biodiversity's Dependence' on Water;
- Scavenger hunt;
- Environmental stewardship storyline;
- Biotechnology word search; and
- Memorabilia's in the form of bags, water bottles and mugs.

The dynamic nature of education and training necessitates continuous adaptation, and creation of new education materials. Figure 18 shows a summary of the new materials produced in 2013.

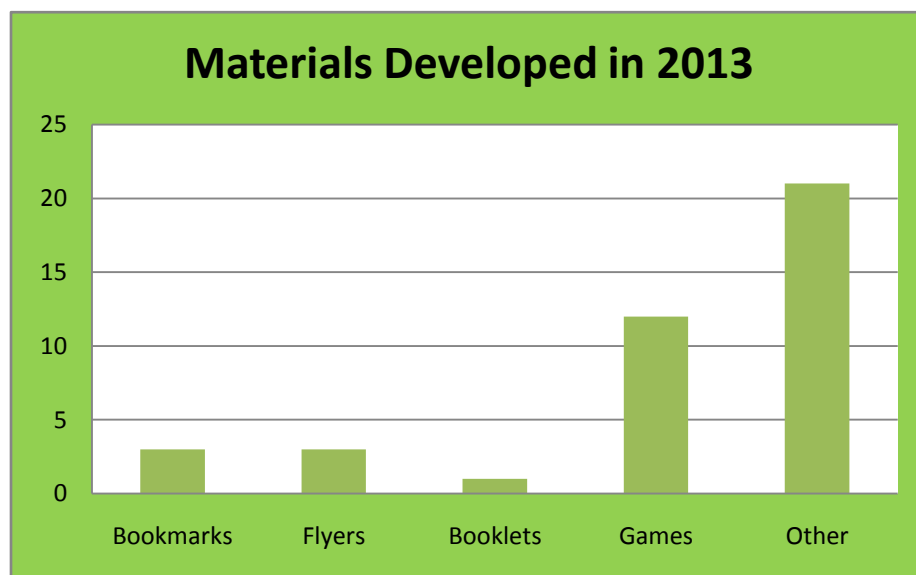


FIGURE 18: EDUCATIONAL MATERIALS DEVELOPED IN 2013.

## 5.2 OUTREACH

Outreach is crucial to fostering awareness on environmental issues and influence attitudinal change for a clean and healthy environment. The year 2013 was not void of challenges for the

Agency as it sought to expand the magnitude and reach of its public awareness programmes. The Agency continued to build on the successes, and capitalised on the opportunities and lessons learned from 2012. Outreach was conducted in 2013 as follows:

### **International Year of Water Cooperation**

The United Nations General Assembly designated 2013 as the *International Year of Water Cooperation*. This brought to the fore the fact that cooperation is essential to strike a balance between the different needs and priorities and to share this precious resource equitably. Promoting water cooperation implies an interdisciplinary approach bringing in cultural, educational and scientific factors, as well as religious, ethical, social, political, legal, institutional and economic dimensions.

### **World Wetlands Day**

Five sessions were conducted for two (2) visiting primary schools at the Nature School. An interactive presentation entitled 'Wetlands and Water Management' addressing this year's theme, served as the awareness tool on wetlands and the role they play in maintaining our water supply and the quality of water we receive.

### **World Water Day**

World Water Day is observed annually on March 22 as a means of focusing attention on the importance of freshwater and advocating for the sustainable management of freshwater resources. In 2013, it was celebrated under the theme: "*Water Cooperation*", in keeping with the designation of 2013 by the UN as the *International Year of Water Cooperation*. In keeping with the observance, two seminars were conducted on '*Water Cooperation*' at the Essequibo Islands and Leguan Secondary schools with more than a hundred students participating in the activities. In addition, presentations highlighting the World Water Day theme were made on different occasions to five (5) groups, namely, the Leo Club of East Demerara, the Olivet Seventh-day Adventist Church, the Young and Thoughtful Youth Club of Linden, the Stewartville Seventh-day Adventist Church, and the Grace Temple Assemblies of God Church of New Amsterdam, Berbice. The Agency also collaborated with Guyana Water Inc. (GWI) in the execution of a debate and news-spread for WWD.



## **Earth Day**

Earth Day 2013 was celebrated under the theme “**The Face of Climate Change**”. To observe this Day, activities were coordinated and executed in collaboration with the MNRE, which included an Earth Day newspaper feature and quiz and a radio tips. Outreach sessions were also conducted at eighteen (18) primary schools in Georgetown and its environs. These sessions were also used to launch the Art competition for International Biodiversity Day.

## **International Day for Biodiversity**

International Day for Biodiversity 2013 was observed under the theme: “**Water and Biodiversity**”. Activities were coordinated and executed in observance of IDB as follows:

### ***Art Competition***

An Art Competition was held targeting Grade 6 students from 18 Primary Schools in and around Georgetown. Entries were received from seven (7) schools and the art pieces were judged based on creativity, originality and relevance to the theme. Omari Tyrell of Green Acres Primary, Elli Grandsoult of Eccles Primary, and Serena Hope of St. Pius Primary were placed first, second and third, respectively

### ***Youth Forum***

This year, the annual Youth Forum in observance of International Day of Biological Diversity was held in Linden, Region 10, in May. The six (6) secondary schools in the mining town participated in this activity by preparing and delivering presentations on the following topics:

- Biodiversity’s dependence on water;
- Biodiversity and the water cycle;
- Water pollution and its impacts on biodiversity;
- Water-wise Practices;
- Case Studies: Green Initiatives for Water Protection and conservation in Guyana; and
- Biodiversity in Guyana.

### ***Documentary Night***

A documentary entitled ‘Day of the Caiman’, which was produced by Blue Paw Artists and made available by NRMD was presented to an audience of fifty two (52) persons from government

agencies, the private sector, sector agencies, NGOs, educational institutions and the general public. At the ceremony, Mr. Ronald Webster, Chairman of the Private Sector Commission, made remarks and the top three winners of the Art Competition were awarded prizes of book vouchers worth \$25,000, \$20,000 and \$15,000, respectively. This activity was held at the National Library (Conference Room) on the evening of May 22, 2013.

### ***Biodiversity Tour***

Students and teachers from Bel Air Primary, East La Penitence Primary, St Pius Primary, and Josel Education Institute, participated in the Mangrove Heritage Trail Tour. This was a part of the prize for the top entries in the IDB Art Competition.

### **WED 2013**

This year, WED was celebrated under the theme: ***'Think. Eat. Save. Reduce your footprint.'*** This theme was intended to raise awareness of the impact that food choices have on the environment, and provide relevant information for persons to make informed decisions with regard to their food choice and consumption habits. The various activities coordinated to get this message across included:

### ***Green Walk***

The Annual Green Walk took place in June under the theme: ***'Think. Eat. Save. Reduce your footprint'***. It commenced from the Umana Yana and culminated at the National Park. Over one thousand (1,000) persons participated in the Walk this year, making it the largest since its inception and included Government Ministries, Private Sector, Sector Agencies, NGOs, Educational Institutions and members of the public. Prizes were awarded for Best Banner, Largest Contingent, and Most Uniform Contingent and Best Chant.

### ***WED Ceremony and Exhibition***

A World Environment Day Ceremony was coordinated and held on June 05 at the Umana Yana. Close to three hundred persons attended including members of the government, the diplomatic corps, the private sector, various groups and members of the public. H.E. President Donald Ramotar, Minister of MNRE, Robert Persaud, H.E. D. Brent Hardt, US Ambassador, and Ms. Khadeja Musa, UNDP Resident Representative, all addressed the audience. The ceremony was complemented by musical items and dramatic pieces by students from Winfer Gardens Primary, Marian Academy, and West Demerara Secondary School. Also, an exhibition with

exhibits portraying practical applications of the WED theme added additional interest to the event.

### ***Rides for the Environment***

'Rides for the Environment' were held in Linden and Essequibo on June 16 and 29, respectively, attracting over 60 participants. At both Rides, prizes were awarded for three (3) categories, namely, largest contingent, oldest rider and youngest rider. Participants were drawn from schools, youth groups, training institutions, and NGOs.

### ***WED Forum***

A forum which focused on climate change and the World Environment Day theme was held at the Corentyne Comprehensive Secondary school in Region 6. Two hundred and eighteen (218) Grades 7 and 8 students and seven (7) teachers of the School benefited from this activity. The forum was also complemented by creative pieces which reflected the WED theme, including poetry and musical items.

### ***Environmental Camp***

During the period July 15-18, 2013, the EPA hosted its annual Environmental Camp at Camp Somerville, Soesdyke/Linden Highway. A total of forty (40) participants aged 9-12 and drawn from Regions 3, 4 and 5 participated in the Camp's activities which centred on the WED theme. Learning took place through various learning tools and methods such as: stories; food waste audit; games; videos; group activities; nature walk; and, other outdoor activities. The activities aimed at influencing positive environmental attitudes and actions; and, building team spirit and skills for informed decision-making.

### ***Seminars***

Prison wardens and a few inmates benefitted from a presentation and discussion on the World Environment Day theme: "***Think. Eat. Save. Reduce your footprint***". This was one of several capacity building sessions planned by the Guyana Prison Service to raise awareness on environmental issues.

A presentation on the World Environment Day theme was also delivered to twenty-eight (28) members of the Red Cross Society Youth Group.

### ***International Ozone Day***

Three (3) half-day workshops were conducted during September 16-18, 2013, in observance of the International Day for the Preservation of the Ozone Layer. These workshops targeted

twenty (20) primary and seven (7) secondary schools in Region 5 and were held at Mahaicony Primary, Bath Primary, and Belladrum Secondary schools. A total of one hundred and ninety-four (194) students and twenty-seven (27) teachers benefited from these interactive and informative sessions.

### **Annual Taxidermy Camp**

Presentations were delivered to forty-four (44) participants on 'Pollution and Waste Management'. They were also engaged with games and other interactive activities centred on the topic.

### **Zoo Camp**

Three sessions were conducted at this year's Zoo Camp which benefitted sixty-six (66) children aged 6-13 attending the Annual Zoo Camp at the Nature School. These sessions focused on Waste Management, teaching participants about the effects of littering on the environment, the importance of proper waste disposal, the 3 R's, and composting.

### **Teacher Training Workshop**

Twenty-six (26) second year Trainee Teachers and one (1) Lecturer of the CPCE participated in the fourth EE Workshop during October 25–27, 2013, at Camp Wesleyana, Linden/Soesdyke Highway. This was the second batch of Associated Degree Teachers to be trained in Environmental Education. Teachers were exposed to various tools and methodologies which can be employed to effectively infuse environmental education into various subject areas, while still achieving the objects of the school curricula. The sessions were very interactive and employed methodologies to promote critical thinking, raise the level of awareness of participants as well as provide hands-on experiences through practical exercises.

### **School Visits**

One-hundred (100) students and ten (10) teachers from Corentyne Comprehensive Secondary School visited the Agency as part of a tour. They were hosted by the EITD in the Agency's Boardroom and were engaged in interactive activities aimed at informing them about the Agency's work and environmental issues.

### **Climate Change Outreach**

Climate Change outreach sessions were conducted with eighteen (18) primary schools in Georgetown and its environs. A total of nine hundred and thirty-one (931) students have participated thus far.

### **Solid Waste Management Workshops**

Four (4) half-day empowerment workshops on Waste Management and the Pick-it-Up Guyana initiative were conducted. These targeted seventy-one (71) students and ten (10) teachers from primary and secondary schools in New Amsterdam. The workshops were held during July 03-04, 2013, at the New Amsterdam Town Hall.

### **Nature School - Guyana Zoological Park**

Collaboration with the Guyana Zoo for Outreach at the Nature School was conducted in 2013. These sessions highlighted a different topic for each school term: 'Wetlands and Birds', 'Wetlands and Water Management', and 'Waste Management and You'. Sessions held on Wednesdays, involved a total of 259 students from three (3) Primary Schools.

### **PRESENTATIONS**

A total of fifty-seven (57) presentations (Appendix 1) were prepared and delivered to one hundred and thirty-four (134) groups. The focus of presentations was largely determined by the theme and observance of international environmental days; for most months, the focus changed and, for some months, there was a double focus (Figure 19).

A suite of presentations was prepared on each theme and a total of twelve such suites were prepared for the year. These covered a wide range of environmental topics including: the EPA's work; wetlands; water; climate change; biodiversity; plants; food production and the environment; Environmental Clubs management; ozone layer depletion; marine litter; and, environmental education and its infusion into the school curriculum.

April to October was a peak period in terms of the presentations delivered. The highest numbers of groups were reached in April and October; in both of these months, there are two

international environmental observances. Schools formed the majority of the groups to which presentations were made; only a few youth groups and organizations were reached.

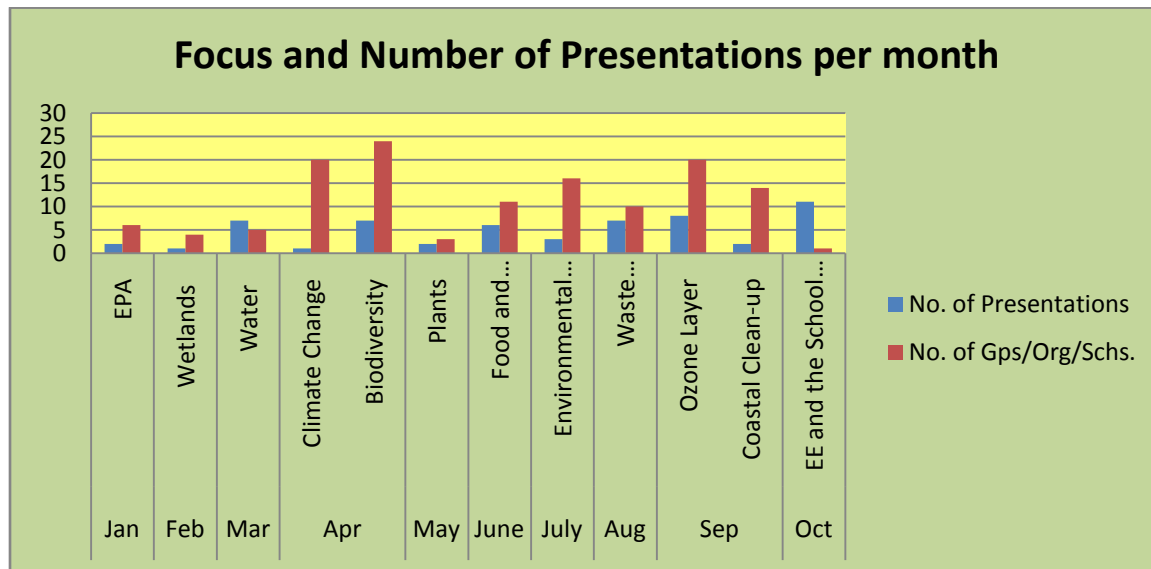


FIGURE 19: FOCUS AND NUMBER OF PRESENTATIONS IN 2013.

## Exhibitions

The Division participated in a number of Exhibitions during the year during which information materials, on a range of environmental issues, were distributed (Table 1). The opportunity was also maximally utilised to engage the public in interactive activities through which they learnt of environmental issues.

TABLE 1: EXHIBITIONS IN WHICH THE AGENCY PARTICIPATED IN 2013

Exhibitions in which the Agency participated in 2013	
1. UG Career Fair	7. Mining Exhibition
2. GFC International Day of Forest Exhibition	8. 28 <sup>th</sup> Session of Latin American and the Caribbean Exhibition
3. Linden Expo	9. Ministry of Education Career Fair
4. World Plant Day Exhibition	10. Fire Service exhibition
5. International Day for Biodiversity exhibition	11. GuyExpo
6. World Environment Day Exhibition	12. Kwakwani Day Exhibition

## 6.3 MEDIA PROGRAMMES

### Television Appearances

Several television appearances were made to create awareness (Table 2).

TABLE 2: TV APPEARANCES IN 2013

MONTHS OF 2013	APPEARANCES
June	Several television appearances were made to create awareness on the World Environment Day and activities planned; these included: <ul style="list-style-type: none"><li>• Guyana Today Show – NCN (two appearances).</li><li>• Day Break – MTV Channel 65.</li></ul>
July	Media coverage was given for the initiation of the Waste Management Empowerment workshop in New Amsterdam; this was aired on: <ul style="list-style-type: none"><li>• Little Rock Television Station; and</li><li>• NCN Ch 15 – New Amsterdam.</li></ul>
September	The coordination for ICC 2013 by Pick-it-up Guyana Initiative and the EPA was highlighted on the Guyana Today Show.

### Panel Discussions and TV Interviews

The Agency coordinated and participated in Panel Discussions in observance of three (3) environmental days: World Water Day; International Day for Biological Diversity; and, World Environment Day.

Additionally, the Agency participated in two (3) television interviews, two (2) were in observance of WED and one (1) in observance of World Water Day.

### Press Releases

During the year, five (5) Press Releases were prepared and sent for publishing in newspapers on subjects such as: Environmental Volunteer Training; World Environment Day Activities; WED Message; Response to newspaper article on the Konawaruk River; and, Press Briefing to

highlight the MNRE's collaboration with the "Fashion Weekend" in observance of "World Water Week".

### ***Litter Prevention Regulations (LPR)***

A draft Communication Strategy on the LPR was created and submitted to the MNRE. Also, simplified information on the Litter Regulations were prepared and submitted to MNRE; these were utilised for PSAs shown on an Eldorado Shines TV Programme. The text for eight (8) PSAs on the Litter Regulations was also prepared.

### **Newspaper Articles**

To engage the public through the print media, articles were written and sent for publishing every week in the Guyana Chronicle and Guyana Times newspapers. However, due to circumstances beyond the Agency's control, some of the articles were not published.

In the "Our Environment" Column in the Sunday Chronicle, a total of forty-two (42) articles were published for the year. For the Column "Our Earth, Our Environment" featured in the Thursday Edition of the Guyana Times, a total of thirty-three (33) articles were prepared for publishing. Also, two (2) news spreads were prepared and published for Earth Day and International Day for Biological Diversity.

## **5.4 DOCUMENTATION CENTRE**

The Document Centre continued to be a valuable source of information for researchers and members of the public. Books, EPA publications, and magazines were reorganized and categorized in the Document Centre.

## **5.5 PICK IT UP GUYANA**

The "Pick-It-Up Guyana" (PIUG) is an initiative of the Ministry of Natural Resources and the Environment which was launched in June 2012. It is a focused "clean-up" initiative supported



by the private sector, public sector and concerned Guyanese and is being implemented in the capital city of Georgetown, along the coastal areas from Regions 2 to 6, and is extended to mining communities and indigenous communities.

PIUG places emphasis on the adoption of environmentally-sound practices, enforcement and deliberate actions to rid the environment of garbage. A holistic approach is employed to ensure the success of this initiative including enforcing anti-littering regulations and standards within governmental and private institutions; Clean-up drives; and, promotion of sustainable waste management and recycling practices.

In 2013, PIUG executed environmental awareness workshops and school programmes to educate volunteers and school children about the environment, waste management, and how to become environmental advocates.

### **Raising awareness**

Fourteen (14) presentations were delivered by the PIUG staff (Table 3) on pollution and the environment, and waste management techniques to various groups including religious organisations, non- governmental organisations, and students. During 2013, PIUG participated in four (4) exhibitions including GUYEXPO, where educational materials were distributed, and members of the general public were engaged.

### **Collaboration and Coordination**

Four (4) volunteer workshops were coordinated, and assistance was given to five (5) non-governmental organisations in planning and coordination of environmental enhancement activities. PIUG undertook five (5) major joint activities, including coordinating the viewing of the “Trashed” documentary on global waste management in collaboration with the US Embassy Guyana Shines Project, and the celebration of International Volunteer Day with the Caribbean Youth Environment Network.

#### **TRAINING**

PIUG developed its capacity over the year by attending numerous workshops, including *‘Sustainable Solid Waste Management in CARICOM countries’* hosted in Okinawa, Japan.

Additionally, PIUG participated in workshops on using social media the right way, accessing funding from donor agencies, etc., hosted by the Volunteer Support Platform under the Ministry of Culture, Youth, and Sports.

**TABLE 3: PIUG PRESENTATIONS IN 2013.**

Date	Activity	Title of presentation	Target audience
March	World Water Day	Composting and the 3Rs of waste management	Secondary school students (Grade 7)
March	Volunteer workshop	<ul style="list-style-type: none"> <li>All about the environment</li> <li>Composting</li> <li>The 3 Rs of Waste Management</li> </ul>	Members of Faith Revival New Testament Church of God
April	Volunteer workshop	<ul style="list-style-type: none"> <li>Pick it up Guyana</li> <li>Water Conservation</li> </ul>	Grace Environmental Rangers Club
July	MNRE outreach	The work of Pick-it-up Guyana	General public
July	EPA Annual Environmental Camp	Waste management (3 Rs, composting)	Grade 6 students
August	Taxidermy Camp	Pollution and the Environment	Children aged 6-14
September	Outreach- ICC	Marine Pollution	Grade 6
November	Nature School	Waste Management and You	Primary School students (Grade 6)
December	International Volunteer Day	Youth and Sustainable Development	Secondary school students aged 15-16
December	SWM Programme Public Education and Awareness Seminar	Pick-it-up Guyana: Achievements and Challenges	General public

### **Development of Educational Materials**

The PIUG, being a new initiative, was involved in the development of a number of public awareness materials which included brochures, posters, games, bill boards, etc., aimed at promoting environmental awareness and fostering environmentally-sound practices.

Four (4) educational materials were finalized including two (2) posters on littering and PIUG facts, and two (2) brochures for citizens and businesses. Also, a PIUG banner and a board game (snakes and ladders) highlighting harmful and beneficial waste management practices were designed and printed for use at GUYEXPO 2013. Environmental messages were created for memorabilia for distribution at exhibitions (t-shirts, key rings, reusable water bottles). A country report on activities for International Coastal Cleanup 2013 was prepared.

## **Coordination**

PIUG coordinated or assisted in the coordination of the following:

- Assisted in the coordination of a Clean-Up executed by the Masjid An-Najm and Social Centre;
- Coordinated three (3) volunteer workshops, two (2) for Lions and Leo Clubs, and one (1) for individuals from various communities in Georgetown, West and East Coasts Demerara, and West and East Banks Demerara,, and Grace Environmental Rangers;
- Assisted in the coordination of the Caribbean Youth Environment Network's tree-planting exercise in observance of World Forestry Day in the Botanical Gardens;
- Assisted in the coordination of an enhancement activity with the Guyana Muslim Environment Initiative;
- Coordinated volunteer workshop for thirty (30) Keep Guyana Clean Sticker Project volunteers. Assisted in the coordination of clean-up and enhancement activity by volunteers at Den Amstel, West Coast Demerara;
- Coordinated an enhancement exercise along Brickdam in observance of Earth Day; and
- Presented 30 plants to the Vlissengen Square East Ruimveldt Environmental Group.

## **Collaboration**

During 2013, PIUG collaborated with stakeholders as follows:

- Executed a "Keep Guyana Clean" Sticker Project in collaboration with the Japan International Cooperation Agency and United Nations Volunteers at bus parks. The objective of the exercise was to raise awareness and empower bus drivers and conductors to contribute to anti-littering efforts;
- Coordinated Clean-Ups and public awareness sessions in interior locations in collaboration with the Guyana Geology and Mines Commission at Madhia, Port Kaituma, and Iteballi;

- The viewing of “Trashed”, an environmental documentary about the global solid waste problem, was executed in collaboration with the United States Embassy’s Guyana Shines Programme in Regions 4, 6, and 10; approximately five hundred (500) secondary school students, teachers, volunteers, and members of the public attended;
- Clean-up and tree-planting in collaboration with the Guyana Tourism Authority in observance of Tourism Awareness Month on October 16. Approximately 40 volunteers were present.
- A Panel discussion on Youth and Sustainable Development in observance of International Volunteer Day, in collaboration with CYEN.

### **Media Programmes**

PIUG’s media activities during 2013 included:

- Contribution of articles to EPA’s Greenleaf newsletter and submitted articles for publication in the Guyana Chronicle and Guyana Times;
- Preparation of Press Releases;
- Interviews for television programme;
- Preparation of scripts for and editing of television programme;
- Joint television programme and press conference with Guyana Fashion Weekend representatives and the EPA on issues surrounding water, and using fashion as a platform to encourage its conservation in observance of World Water Week.

PIUG has had a challenging, yet successful 2013. The departure of two staff members during the year resulted in a pause in the momentum gained since the launch of the initiative. Since then, a permanent PIUG Coordinator, has taken the mantle, and has expanded the reach of the programme through a number of collaborative efforts, and with assistance from Environmental Officers from the EIT Division of the EPA.

## 6. ADMINISTRATION

The Administrative Division comprises the Administrative, Finance, Human Resources, and Information Technology (IT) Units. The main responsibilities of the Division are related to Administrative and Human Resources Management. Materials, equipment and services to meet the needs of the Agency are procured with core funding from Government subvention and donor funded projects.

This year, the Agency received subventions totaling G\$191,596,000 from the Government of Guyana, compared to G\$160,920,000 in 2012. The difference between the total subvention received and the actual expenses for the year was supported by revenues from the Agency's Trust Fund Account which totaled \$43,739,000. A statement of the Agency's financial position at the end of 2013 is attached (Appendix VII).

For the year in review, achievements in Financial Management were as follows:

- The Audited Financial Statements for EPA and Wildlife Division for Year 2011 were received from the Audit Office of Guyana;
- The 2012 Draft Financial Statements for EPA and Wildlife Division were prepared and submitted to the Audit Office of Guyana and Audited Financial Statements are currently being finalized;
- Quarterly Financial Overview Reports were prepared and submitted to the Ministry of Finance;
- Monthly Financial Reports were submitted to the Board of Directors and Management of EPA;
- All financial reporting requirements for the Regional Biosafety Framework Project; the National Biodiversity Strategy and Action Plan Project , and the KfW Phase II Small Grants Project, were met in accordance with each Project's guidelines; and
- The Agency's Budget for the year 2014 was prepared and submitted to the Office of the President.

### 6.2 ADMINISTRATIVE UNIT

Administrative and logistical support continued to be provided to all Divisions of the Agency. The evaluation and procurement of materials, equipment and services were efficiently managed with core funding from the Government of Guyana.

## **Procurement and Management**

A physical check of fixed assets was conducted by the Audit Office of Guyana at the beginning of the year. This was made against the Agency's maintained stock records, namely, its Inventory Management Document and monthly Stock Reports. Over the year, efforts were directed towards the conduct of internal asset checks and updating of the Asset Register. This activity was carried out while also attending to increased demands for Administrative Support in 2013, as a result of the expansion of the Agency's technical programmes.

In addition to asset management, procurement of assets and services continued during the year. Capital items were purchased under National Capital Expenditure 2013 as were items approved for purchase under the Agency's Trust Fund. Items procured included:

- Water Quality Kit and Meters
- Global Positioning System (GPS)
- Noise Meters
- Laptops
- Field Tablets
- Desktops
- Cellular Phones
- Printers
- Human Resources Software
- Quick-books Accounting Software
- Network Tester and Kit
- Air Conditioning Units
- Filing Cabinets
- Office Chairs
- P.A. System
- Pressure Washer
- Microwaves
- Kettles
- Quality Life Jackets
- Stationery and dietary items

Through the National Competitive Procurement Process administered by the National and Procurement and Administration Board (NPTAB), RK's Security Services were procured to secure the Agency.

## **Vehicle Maintenance**

The Agency carried out regular and timely maintenance of its vehicles in order to avoid extensive repairs and subsequent substantial costs and to ensure that all its transportation needs were met. Also, renewal of legal documents (insurance, fitness, road license) was arranged in a timely manner.

The contract for works to repair one of the Agency's field vehicles was awarded by the National Procurement Board; this vehicle was extensively damaged in an accident. During the year, the Agency incurred high costs in delivering timely maintenance and repairs to the aged vehicles

fleet. The Agency also sold two of its aged vehicles during the year, through a competitive tender process.

### **Building and Compound Maintenance**

Efforts continued towards the enhancement of the general aesthetics of the Agency's Offices and compound through regular cleaning, brushing and maintenance. Also diagnosis testing and repairs were completed on the electrical system in the lower flat of the building following electrical problems experienced in this section.

During the year, contracts were prepared and signed for the following works and services:

- Termite control;
- Disposal of sanitary units;
- Maintenance of the photocopier;
- Electrical and carpentry repairs; and
- Service and repairs to air conditioning units.

The Agency's electricity Generator Set was serviced and its ATS box checked. To conserve energy use, energy saving bulbs were installed throughout the Agency as part of the Energy Saving Audit coordinated by the Guyana Energy Agency.

Provision was made within the building for office space for the new Environmental Management Compliance Division (EMCD). Also, offices were outfitted for the Director of the EMCD; Human Resources Assistant; and Legal Officer. Relocation of the EPA Officers from The Jenman Education Centre to the Agency was facilitated.

Through the National Competitive bidding process, a contract was awarded for works to rehabilitate the Entrance Road and Parking Area within the Agency's compound. However, due to the inclement weather, the contractor made a request for an extension into 2014.

Over the year, issues of faulty plumbing were addressed by repairs and installations as necessary. Pipes were repaired, unearthed and straightened to stop leakage, and taps were installed. Maintenance work was also carried out in the female washroom located on the lower flat of the building. Work was also contracted for repairs to the roof of the Agency's building.

## **Additional Support**

Additional support was provided in the following areas:

- Support to EITD in arrangements for GGMC Mining week.
- Support to EITD in procurement and arrangements for Environmental Camp.
- Supported EMPD/EMCD with arrangements for Public outreach in Berbice, ECD and Lethem.
- The Agency's 2014 Budget was compiled and submitted to the MNRE for review.
- Assisted the HRO to source uniform material for the Agency Staff.
- Education, Information and Training Division:
  - Printing of Brochures and activity sheets for outreach programmes.
  - Preparation and Hosting of the Annual Green Walk, Ride for the Environment, and Public Ceremony in observance of World Environmental Day.
  - Outreach activities to schools.
- Natural Resources Management Division:
  - Preparation and supporting the NBF project in the Biodiversity consultations countrywide.
- Collaboration with the Internal OSH Committee to address workplace hazards.
- Administrative and logistical support was provided to the various Divisions of the Agency.

## **6.3 HUMAN RESOURCES**

The Human Resources Unit is responsible for recruiting a skilled and committed workforce and building a team of professionals empowered to perform competently and with excellence.

At the end of 2013, seventy-eight (78) staff members were employed at the Agency. Of these, seventy-four (74) were full time employees and four (4) project staff.

Over the year, eleven (11) vacancies were advertised and applicants were interviewed for ten (10) of these positions; one position was re-advertised (Appendix II). Additionally, thirty (30) appointments and sixteen (16) staff confirmations were made, while three (3) staff members were promoted (Table 4). During the year, eight (8) members of staff tendered their resignations while the employment of five (5) staff members was terminated. Internships were offered to three (3) university students who were placed in the NRM and EM Programmes.

The services of five (5) staff members were terminated during the year: two (2) Handymen; two (2) drivers; and one (1) Cleaner. There was also one suspension.



Three students of University of Guyana serve a two-month internship at the Agency - two (2) within the Environmental Management Division and one (1) within the Natural Resources Management Division.

TABLE 4: STAFF EMPLOYMENT DYNAMICS IN 2013.

<i>Position</i>	<i>Vacancies</i>	<i>Appointments</i>	<i>Confirmations</i>	<i>Promotions</i>	<i>Resignations</i>
<i>Director</i>		1	1		
<i>Senior Environmental Officer</i>		6	3		3
<i>Environmental Officer (I)</i>		8	7		2
<i>Environmental Officer (II)</i>		1	1	3	
<i>Technical Support Officer (IT)</i>		1			1
<i>Field and Data Technician</i>		1			1
<i>Project Manager NBSAP Project</i>		1			
<i>Project Assistant NBSAP Project</i>		1			
<i>Legal Consultant NBF Project</i>		1			
<i>Project Assistant NBF project</i>		1			
<i>Human Resources Assistant</i>		1	1		
<i>Driver</i>		2			
<i>Legal Officer</i>		1			
<i>Executive Assistant</i>		1			
<i>Handyman</i>					
<i>Cleaner</i>			1		

## **Training and Workshops**

### ***Overseas***

Fourteen (14) Cabinet Papers were prepared requesting approval for staff members to participate in meeting and or workshops abroad. Nine (9) of these were related to the Natural Resources Management Programme; three (3) to the Environmental Management Programme;

and two (2) to international environmental policy and funding. Four (4) of the fourteen (14) requests were approved, two under the NRM Programme and two for international policy and funding. Additionally, one (1) request that was submitted in 2012 under the NRM Programme was approved while through the MNRE, two (2) staff members were approved to participate in overseas workshops (Appendix IV ).

Three (3) staff members were nominated to pursue the following post-graduate training courses in Germany: Environmental Management for Developing and Emerging Economies; Green Economy for Developing and Emerging Countries; and Climate Change Adaptation for Developing and Emerging Countries; however these have not received approval.

### ***Local***

Staff members participated in thirty-seven (37) local meetings and workshops in key areas such as:

- Geographical Information Systems;
- Emergency Planning and Management;
- Disaster Risk Management;
- Environmental Standards and Accreditation;
- Development of the National MRVS;
- Specification and Labeling of Commodities;
- Water Resources Management;
- Environmental Practices in Mining;
- Accounting Practices;
- Proposal Writing and Development;
- Creative Problem Solving and Analytical Thinking;
- Communications;
- Stakeholder Consultation on the Restriction of the Use of Styrofoam;
- Adaptation to Climate Change;
- Tourism Investment; and
- The Nagoya Protocol.

## **6.4 INFORMATION TECHNOLOGY**

### **PC Support**

In providing support to personal computers assigned to the Agency's Staff, the following actions were taken:

- Repairs were conducted on a number of desktops and laptops that were affected by hardware or software problems.
- Servicing was carried out on six (6) printers in the Agency.
- Five new Canon Printers were deployed within the Agency.
- Complete computer systems were deployed to all new staff employed at the Agency.
- Reloading of the operating systems and appropriate programmes was carried out on several computers to replace corrupt software or hardware failure.
- Defective monitors, mouse, keyboards, surge protectors, line conditioners and UPS were replaced.
- All Computer systems were upgraded with the relevant hardware for optimal performance on Windows 7 32bit operating system.

### **Network Support**

The Local Area Network (LAN) was maintained and enhanced:

- The LAN was expanded to accommodate additional staff; this entailed the installation of structured cabling and installation of network switches.
- All network connectivity errors were fixed such as defective cables, surface mounts and switches. Five defective network switches were also replaced.
- User accounts, mapped drives and permissions were created to facilitate new staff.
- Assistance was given to the NBRIS consultant in addressing problems relating to the LAN Module.
- A Virtual server environment was configured to accommodate the development of the Human Resource Software.
- All Internet-related problems were fixed in a timely manner.
- The Kaspersky Antivirus Suite was deployed throughout the Agency and set to receive updates automatically through the Kaspersky virtual server environment that was configured by the Unit.
- All problems with EPAGUYANA mail were fixed.
- Defective hard drives were replaced on the Power Edge T710 server; this server is now fully functional.
- Hardware and software firewalls were updated to the latest firmware and software.
- Four 3000VA UPS were repaired and deployed to the network to replace defective units.
- Complete backups of the Agency's data and Virtual machines were done.
- Virus definitions were updated on all of the Agency's Servers.

## Management Information Systems

- Maintenance was carried on the Assets database; it was also backed up.
- The Complaints and Permits Databases were updated and maintained. The SQL backend of the database was backed up and maintained. Queries and data sets were generated based on the requirements of the EM Division.
- New documents, downloads and vacancies were uploaded to [www.epaguyana.org](http://www.epaguyana.org) website. The Website was also backed up.
- The GEFGUYANA.ORG country website was deployed and maintained.
- New sections and download categories were created based on the requirements of the Agency.
- The NBRIS internal web module was deployed and support was given as necessary.
- All website and hosting problems were fixed in a timely manner.

## 7.0 CONCLUSION

The Agency's work programme continued to be expanded in 2013 and was implemented with dedication and within the resources available. With the Litter Prevention and Wildlife Management and Conservation Regulations now enforceable, it is expected that the work programme would be further expanded in 2014. Further, it is expected that the Water Quality Unit will be staffed and operational in 2014.

The Agency will endeavour to design and implement tools and strategies to cope with the increasing workload and will continue to advocate for support as necessary to ensure that it makes desired progress towards its mandate. New approaches to increased participation in environmental management will be explored and implemented in 2014. This is aimed at reducing new environmental complaints and resolving existing ones.

Partnerships are vital to the successful implementation of the Agency's work programme. As such, existing linkages with sector agencies, the private sector and non-governmental organizations will be maintained and new ones forged as necessary to advance its goals and objectives.

## APPENDICES

### Appendix I: EPA Staff List at the end of December, 2013.

	NAME OF OFFICER	DESIGNATION
	<b>Office of the Executive Director</b>	
1.	Indarjit Ramdass	Executive Director (ED)
2.	Kerean Geer	Executive Assistant to ED
3.	Ramsarran Etwaroo	Driver to ED
	<b>ADMINISTRATIVE DIVISION</b>	
4.	Dhanraj Persaud	Administrative Director (AD)
5.	Faneeza Alli	Executive Assistant to AD
6.	Ryan Tiwari	IT Specialist
7.	Antonio Valenzeoela	Network Administrator
8.	Bharat Sasenarine	Technical Support Officer
9.	Ronley Kendall	Human Resources Officer
10.	Jewell-Ann Harry	Human Resources Assistant
11.	Lancelot France-Cummings	Finance Officer
12.	Fiona Marshall	Senior Accounts Clerk
13.	Debbie Wilkinson	Senior Accounts Clerk
14.	Hollee Ragnauth	Accounts Clerk
15.	Dadre Bayley	Accounts Clerk
16.	Shivon Caesar	Administrative Officer
17.	Divinjali Bailey	Administrative Assistant
18.	Eric Hinds	Driver
19.	Kwesi Smith	Driver
20.	Kamal Ramdayal	Driver
21.	Kumardev Samaroo	Officer Assistant
22.	Avinash Persaud	Officer Assistant
23.	Winifred Perreira	Cleaner
24.	Oslin Peters	Cleaner
25.	Fredericks Compton	Handyman
26.	Richard Layne	Legal Officer
	<b><i>Environmental Management Permitting Division</i></b>	
27.	Geeta Singh –Ubaldo Espinosa	Director
28.	Radhika Mootoo	Executive Assistant
29.	Sonia Gumbs-Luke	Senior Environmental Officer
30.	Tejivarti Persaud	Senior Environmental Officer
31.	Karen Alleyne	Senior Environmental Officer
32.	Anzaleen Hoosein	Environmental Officer II
33.	Nalissa Persaud	Environmental Officer II
34.	Savitri Itwaru	Environmental Officer II
35.	Dulcie Abrahams	Environmental Officer I
36.	Gregoria Vaughn	Environmental Officer II
37.	Melinda Franklin	Environmental Officer I
38.	Andrew Gupta	Environmental Officer I
39.	Latoya Farinha	Environmental Officer II
40.	Marcia Hall	Environmental Officer II
41.	Sharmin Joseph	Environmental Officer II
42.	Saudia Sadloo	Environmental Officer II

43.	Delon Earle	Environmental Officer I
44.	Camille Adams	Senior Environmental Officer
<b><i>Environmental Management Compliance and Enforcement Division</i></b>		
45.	Kemraj Parsram	Director
46.	Colis Primo	SEO, Research and Development
47.	Chandra Anastasia	Environmental Officer I, ICZM
48.	Monique Williams	Environmental Officer
49.	Tashana Redmond	Senior Environmental Officer
50.	Felicia Adams	Senior Environmental Officer
51.	Liverpool Whoopi	Environmental Officer I
52.	Ali Zahair	Environmental Officer I
53.	Browne Denroy	Environmental Officer I
54.	Darshani Seeram	GIS Environmental Officer I
55.	Nadia Nasir	GIS Technician
56.	Junior Paul Chanderpaul	Field Technician
57.	Roneka Joseph	Field Technician
58.	Nicole Hohenkirk	Executive Assistant
<b><i>Education, Information and Training Division</i></b>		
59.	Sharifah Razack	Director
60.	Fareena Alli	Executive Assistant
61.	Candacie Thompson	Senior Environmental Officer
62.	Deuel Hughes	Environmental Officer II
63.	Gracelyn Trim	Environmental Officer I
64.	Aretha Forde – seconded to the MNRE-PIUG	Environmental Officer II
65.	Position seconded to the MNRE-PIUG	Environmental Officer
<b><i>Natural Resources Management Division</i></b>		
	Vacant	SEO, Biodiversity Unit
66.	Asma Sharief	SEO, Protected Areas Unit
67.	Sean Mendonca	SEO, Wildlife Unit
68.	Shanace Odwin	Environmental Officer I
69.	Stacy Lord	Environmental Officer II
70.	Diana Fernandes	Environmental Officer II
71.	Rae Smith	Environmental Officer II
72.	Rayner McAndrew	Environmental Officer II
73.	Alisha Rambarran	Executive Assistant
74.	Vacant	Environmental Officer
75.	Jennifer Bentick	NBF Coordinator
76.	Zynell Blossom Manbodh	NBF Project Assistant
77.	Suparna Bera	NBSAP Coordinator
78.	Charmaine De Jonge	NBSAP Project Assistant

## **Appendix II: Staff Vacancies Advertised in 2013**

1. Environmental Officers I, EMPD; interviews were held on July 26, 2013.
2. Project Assistant, NBSAP Project; interviews were held on August 02, 2013.
3. Project Consultant, NBSAP Project; this position is presently being re-advertised in the daily newspapers and on the Agency's website.
4. Environmental Officer I, EITD; interviews were held on September 12, 2013.
5. Executive Assistant, EMCD; interviews were held on September 13, 2013.
6. Senior Environmental Officer, EMPD, interviews were held on September 17, 2013.
7. Environmental Officer I, EITD; interviews were held on September 12, 2013.
8. Executive Assistant, EMCD; interviews were held on September 13, 2013.
9. Senior Environmental Officer, AFT, EMPD; interviews were held on September 17, 2013.
10. Driver, Admin; interviews were held on November 5 and 11, 2013.
11. Senior Environmental Officer, Protected Areas Unit, NRMD; interviews were held on December 23, 2013.

## **Appendix III: Staff Appointments, Promotions and Confirmations in 2013**

### **Appointments**

1. Ms Juliana Persaud was appointed SEO, Protected Areas Unit, effective January 01, 2013.
2. Mr. Jermaine Clark was appointed SEO, Biodiversity Unit, effective January 07, 2013.
3. Mr. Colis Primo was appointed SEO, Research and Development Unit, effective January 07, 2013.
4. Ms. Anastasia Chandra was appointed Environmental Officer I, EMD, effective January 07, 2013.
5. Mr. Edwin Burnett was appointed Handyman, effective February 04, 2013.
6. Ms. Zynell Blossom Manbodh was appointed Project Assistant for the NBF Project, effective February 19, 2013.
7. Mr. Denroy Browne was appointed Environmental Officer I, EMD, effective March 18, 2013.
8. Ms. Schanace Odwin was appointed Environmental Officer I, EMD, effective March 18, 2013.
9. Ms. Suparna Bera was appointed Project Manager, NBSAP Project., effective April 02, 2013.
10. Mr. Raymond Mohamed has been appointed Driver, within the Administrative Division, effective April 11, 2013.



11. Mr. Teni Housty has been appointed Project Consultant for the NBF Project, effective April 15, 2013.
12. Mr. Vasquez Ramdas has been appointed Environmental Officer I, within the Environmental Management Division, effective April 15, 2013.
13. Mr. Sasenarine Bharat has been appointed Technical Support Officer, within the IT Unit, effective April 16, 2013.
14. Ms. Roneka Joseph has been appointed, Field and Data Management Technician, within the Environmental Management Division, effective April 22, 2013.
15. Mr. Dharamdeo Ramcharitar has been appointed to the post of Handyman, effective May 06, 2013.
16. Mr. Sean Mendonca has been appointed to the post of Senior Environmental Officer, Wildlife Unit, NRMD, effective May 08, 2013.
17. Mr. Kemraj Parsram has been appointed Director, Environmental Management Compliance Division, effective June 02, 2013.
18. Ms. Jewell-Ann Harry was appointed Human Resources Assistant, effective July 2, 2013.
19. Mr. Zahair Ali was appointed Environmental Officer I, EMCD, effective July 02, 2013.
20. Ms. Whoopi Liverpool was appointed Environmental Officer I, effective July 02, 2013.
21. Ms. Felicia Adams has been appointed Senior Environmental Officer, within the Environmental Management Compliance Division, effective July 02, 2013.
22. Mr. Delon Earle was appointed Environmental Officer I, effective August 19, 2013.
23. Ms. Charmaine De Jonge was appointed Project Assistant, NBSAP, effective August 26, 2013.
24. Mrs. Candacie Brower- Thompson has been appointed Senior Environmental Officer, within the Environmental Information and Training Division, effective August 26, 2013.
25. Mrs. Candacie Sobers was appointed Environmental Officer II, EMPD, effective September 02, 2013.
26. Mr. Compton Fredericks was appointed Handyman, effective September 16, 2013.
27. Mr. Richard Layne, was appointed Legal Officer, effective October 01, 2013.
28. Ms. Gracelyn Trim was appointed Environmental Officer I, EITD, effective November 18, 2013.
29. Ms. Nicole Hohenkirk was appointed Executive Assistant, EMCD, effective November 18, 2013.
30. Mr. Kwesi Smith was appointed Driver, Admin, effective December 02, 2013.

### **Promotions**

1. Ms. Latoya Farinha has been promoted to EO II, effective January 31, 2013.
2. Ms. Malicia Hall has been promoted to EO II, effective January 31, 2013.

3. Mr. Deuel Hughes has been promoted to Environmental Officer II, within the Environmental Information and Training Division effective September 08, 2013.

### **Confirmations**

1. Mr. Andrew Gupta was confirmed in the post of EOI, EMD, effective March 03, 2013.
2. Mr. Jermaine Clark was confirmed in the post of SEO, Biodiversity Unit, NRMD, effective April 07, 2013.
3. Ms. Anastasia Chandra was confirmed in the post of EOI, EMD, effective April 07, 2013.
4. Mr. Denroy Browne was confirmed in the post of EOI, EMD, effective June 18, 2013.
5. Ms. Schanace Odwin was confirmed in the post of EOI, NRMD, effective June 18, 2013.
6. Mr. Kemraj Parsram has been confirmed in the post of Director, EMCD, effective September 03, 2013.
7. Mr. Zahair Ali has been confirmed in the post of Environmental Officer 1, EMCD, effective October 02, 2013.
8. Ms. Whoopi Liverpool has been confirmed in the post of Environmental Officer I, EMCD, effective October 02, 2013.
9. Ms. Jewell-Ann Harry has been confirmed in the post of Human Resource Assistant, Admin., effective October 02, 2013.
10. Mr. Rayner Mc Andrew has been confirmed in the post of Environmental Officer 1, NRMD, effective November 01, 2013.
11. Ms. Oslyn Peters has been confirmed in the post of Cleaner, Admin., effective November 12, 2013.
12. Ms. Felicia Adams has been confirmed in the post of Senior Environmental Officer, EMCD, effective October 02, 2013.
13. Mr. Delon Earle has been confirmed in the post of Environmental Officer I, EMPD, effective November 19, 2013.
14. Mrs. Candacie Sobers has been confirmed in the post of Environmental Officer II, EMPD, effective December 02, 2013.
15. Mr. Colis Primo has been confirmed in the post of Senior Environmental Officer, EMCD, effective December 07, 2013.
16. Mr. Compton Fredericks has been confirmed in the post of Handyman, Admin, effective December 16, 2013.

### **Resignations**

1. Ms. Joanne Ford, Special Projects Officer, attached to National Parks Commission has tendered her resignation, effective February 28, 2013.
2. Ms. Earlla Nelson has tendered her resignation, effective April 01, 2013.

3. Mr. Stefan Rix has tendered his resignation, effective March 26, 2013.
4. Ms. Shellaun Harper, Field Technician attached to EMD, has tendered her resignation effective April 04, 2013.
5. Ms. Padmini Persaud, SEO, EITD, submitted her resignation, effective July 01, 2013.
6. Mr. Vasquez Ramdas, EOI, EMD, tendered his resignation effective August 02, 2013.
7. Ms. Juliana Persaud, SEO, PAU, NRMD, tendered her resignation on September 20, 2013 with an effective date of December 11, 2013.
8. Mr. Jermaine Clarke, SEO, BU, NRMD, tendered his resignation effective January 10, 2014.

## **Appendix IV – Terminations and Suspensions In 2013**

### **Terminations**

1. Mr. Edwin Burnett, who was employed in the capacity of Handyman, was terminated effective May 17, 2013.
2. Mr. Raymand Mohamed, Driver, was terminated effective July 05, 2013.
3. Ms. Carla Anderson, Cleaner, has been sent on leave pending her termination, effective August 09, 2013.
4. Mr. Dharamdeo Ramcharitar, Handyman; his services were terminated effective September 05, 2013.
5. Mr. Deodat Puranram, Driver; his services were terminated effective October 10, 2013.

### **Suspension**

One (1) employee was suspended for two (2) weeks for the month.

### **Internship**

The Agency responded positively to a request from the University of Guyana, to accommodate three (3) University Students as part of a two (2) months internship programme; the students that were selected to undergo internship at the Agency were:

1. Mr. Mark December, 1<sup>st</sup> year Environmental Science student, attached to EMD.
2. Ms. Leanna Kalicharan, 4<sup>th</sup> year Biology student, attached to NRMD.
3. Mr. Mahendra Doraisami, 2<sup>nd</sup> year Biology student, attached to EMD.

## **Appendix V - Cabinet Papers prepared for EPA Staff in 2013**

1. Cabinet memorandum was submitted to PS, MNRE, nominating Dr. Indarjit Ramdass, to participate in “the twenty-seventh (27<sup>th</sup>) session of the Governing Council/Global Ministerial Environmental Forum of the United Nations Environmental Programme (UNEP)”, held in Nairobi, Kenya during February 18-22, 2013. Approval was granted and Dr. Ramdass has since attended this Meeting.
2. Cabinet memorandum was submitted to PS, MNRE, nominating Ms. Diana Fernandes to participate in “the Second Regional Meeting of the GEF ABS LAC Project and Workshop on Negotiation of Contracts for Access to Genetic Resources”, held in La Habana Cuba during March 18-22, 2013.
3. Approval has been granted for Ms. Stacy Lord to attend the Caribbean Sub-regional workshop on capacity building for the effective implementation of the Cartagena Protocol on Biosafety, held in St. George’s, Grenada, during February 25 to March 01, 2013.
4. Cabinet Memorandum was submitted to PS, MNRE, nominating Ms. Felicia Adams to participate in the Caribbean Platform of the Global Partnership on Nutrition Management, held in Trinidad and Tobago, during May 07 – 09, 2013. No response was received from MNRE, hence the officer did not attend.
5. Cabinet Memorandum was resubmitted to PS, MNRE, nominating Mr. Jermaine Clark, SEO, NRMD, to participate in the Regional Workshop on Drafting Legislation for the Implementation of the Nagoya Protocol on Access and Benefit–Sharing in Dominica, during June 26 – 28, 2013. No response was received from MNRE, hence the officer did not attend.
6. Cabinet Memorandum was submitted to PS, MNRE, nominating Ms. Karen Alleyne, SEO, EMD, to participate in the Workshop for Capacity Development in the Environmentally Sound Management of Waste Electrical and Electronic Equipment in the Caribbean, held in Port of Spain, Trinidad and Tobago, during July 09 - 11, 2013. No response was received from MNRE, hence the officer did not attend.

7. Cabinet Memorandum was submitted to PS, MNRE, nominating Ms. Geeta Singh, Director, EMD, and Ms. Latoya Farinha, EOII, EMD, to take part in the Regional Training Workshop on Drafting Legislation for the Implementation of the Basel, Rotterdam and Stockholm Conventions, which was held in Trinidad and Tobago, during July 17 – 19, 2013. No response was received from MNRE, hence the officers did not attend.
8. Cabinet Memorandum was submitted to PS, MNRE, nominating Ms. Suparna Bera, Project Manager, NBSAP and Mr. Sean Mendonca, Senior Environmental Officer, NRMD to take part in the Regional Training Workshop on the Clearing House Mechanism which was held in St. Lucia, during September 16 – 20, 2013 and approval was granted.
9. Cabinet Memorandum was submitted to PS, MNRE, nominating Ms. Suparna Bera, Project Manager, NBSAP, and Mr. Sean Mendonca, Senior Environmental Officer, NRMD, to take part in the Regional Training Workshop on the Clearing House Mechanism which was held in St. Lucia, during September 16 – 20, 2013. Approval was granted and these officers attended this workshop.
10. Cabinet Memorandum was submitted to PS, MNRE, nominating Mr. Rayner McAndrew to attend the eleventh (11<sup>th</sup>) symposium on Sea Turtle Conservation in the Guianas, which was held in Paramaribo, Suriname during October 29-31, 2013.
11. Cabinet Memorandum was submitted to PS, MNRE, nominating Ms. Diana Fernandes Environmental Officer II, NRMD, to take part in the Second (2<sup>nd</sup>) Caribbean ABS Workshop which was held in Kingston, Jamaica, during November 25 – 29, 2013.
12. Cabinet Memorandum was submitted to PS, MNRE, nominating Dr. Indarjit Ramdass, Executive Director, EPA, to attend the Global Environment Facility (GEF) Constituency Meeting for the Caribbean which was held in Roseau, Dominica, during October 21 – 22, 2013.
13. Cabinet Memorandum was submitted to PS, MNRE, nominating Ms. Jenniffer Bentick, National Biosafety Framework (NBF) Coordinator, and Mr. Jermaine Clark, Senior Environmental Officer, NRMD, to attend the Regional Steering Committee Meeting which was held at Cavehill Campus, Barbados, during November 06 – 08, 2013.

14. Cabinet Memorandum was submitted to PS, MNRE, nominating Ms. Diana Fernandes Environmental Officer II, NRMD, to take part in the Second (2<sup>nd</sup>) Caribbean ABS Workshop which was held in Kingston, Jamaica, during November 25 – 29, 2013. No response was received from MNRE, hence the officer did not attend.
15. Cabinet Memorandum was submitted to PS, MNRE, nominating Ms. Jenniffer Bentick, National Biosafety Framework (NBF) Coordinator, and Mr. Jermaine Clark, Senior Environmental Officer, NRMD, to attend the Regional Steering Committee Meeting which was held at Cavehill Campus, Barbados, during November 06 – 08, 2013. No response was received from MNRE, hence the officers did not attend.

### **Nominations**

Ms. Sonia Gums-Luke, SEO, EMD, Ms. Anzaleen Hoosein, EOII, EMD, Ms. Malicia Hall, EOII, EMD, and Ms. Candacie Brower-Thompson, EITD, were nominated to pursue post graduate training courses in the following areas in Germany:

1. Environmental Management for Developing and Emerging Economies, held during January 14 – July 15, 2014.
2. Green Economy for Developing and Emerging Countries, held during November 18 – December 13, 2013.
3. Climate Change Adaption for Developing and Emerging Countries, held during October 09 – November 08, 2013.

### **Appendix VI -Workshops and Meetings attended by EPA Staff In 2013**

1. Ms. Darshini Seeram, EO I, GIS, attended a meeting organized by the National Drainage and Irrigation Authority (NDIA) aimed at discussing the GIS Mapping Proposal for NDIA. This meeting was held on February 05, 2013, in the NDIA Boardroom.
2. Ms. Nadia Nasir, GIS Technician, attended a Remote Training course relating the development of Land Use Planning Project. This course was organized and facilitated by the Guyana Land and Surveys Commission, and was held during the period February 04-08, 2013.

3. Ms. Earlla Nelson, EO II, EMD attended the FAO's Annual Accountability Seminar for 2013, held on February 07, 2013, at the Regency Hotel.
4. Ms. Teijvarti Persaud, SEO, EMD, and Mr. Deuel Hughes, EOI, EITD, attended a seminar entitled "Research Dissemination and Utilization". This seminar was organized by the University of Guyana, Faculty of Technology and was held at the University of Guyana on April 10, 2013.
5. Ms. Savitri Itwaru, EOII, Ms. Felicia Adams, EOII, Ms. Anzaleen Hoosein, EOII, Ms. Latoya Farinha, EOII, Ms. Monique Williams, EOI, and Mr. Junior Paul Chanderpaul, Field Technician, attended a six (6) days "Emergency Planning and Management" course organized by the University of Guyana. This course was held at the University of Guyana, Turkeyen Campus during April 15 – 20, 2013.
6. Ms. Geeta Singh, Director, EMD, Ms. Tashana Redmond, SEO, EMD, Ms. Karen Alleyne, SEO, EMD, and Mr. Andrew Gupta, EOI, EMD, attended a three (3) hour lecture on "Introduction to Hydropower Concepts". This lecture was organized by the Guyana Energy Agency (GEA), and was held on April 19, 2013, at Cara Lodge.
7. Ms. Faneeza Alli, EA, Admin. Division, Ms. Radhika Mootoo, EA, EMD, and Ms. Kerean Geer, EA, ED's Office, attended a one (1) day Minute Taking and Memo Writing Workshop on April 24, 2013. This workshop was organized by the Arthur Lok Jack, Graduate School of Business, UWI, and was held in Church Street, Georgetown.
8. Mr. Rae Smith, EOII, NRMD, Mr. Rayner McAndrew, EOI, NRMD, Ms. Gregoria Vaughn, EOI, EMD and Ms. Melinda Franklin, EOI, EMD, attended a one (1) week course offered by the University of Guyana's School of Earth and Environmental Sciences, conducted during the period May 20 – 25, 2013, at UG, Turkeyen Campus.
9. Ms. Geeta Singh, Director, EMD, Mr. Colis Primo, SEO, EMD, Ms. Karen Alleyne, SEO, EMD, and Ms. Stacy Lord, EOII, NRMD, attended two (2) days Proposal Writing and Development Workshop, organized by the Arthur Loc Jack Graduate school of Business, University of West Indies. This workshop was held during June 10-11, 2013, at the CIDA Building, Main and New Market Streets, Georgetown.

10. Ms. Sonia Gumbs-Luke, SEO, EMD, attended the Draft Integrated Disaster Risk Management Plan (IDRMP) Workshop, which was organized by the Civil Defence Commission and held on June 11, 2013 in the Commission's Boardroom.
11. Mr. Colis Primo, SEO, EMD, attended a GNBS symposium in commemoration of World Accreditation Day on June 13, 2013 at Pegasus Hotel, Georgetown.
12. Ms. Geeta Singh, Director, EMD, and Ms. Teijvarti Persaud, SEO, EMD, attended an information sharing session on the development of the National MRVS. This session was organized by the Guyana Forestry Commission and was held at the GFC Multiplex building on June 13-14, 2013.
13. Ms. Tashana Redmond, SEO, EMD, Ms. Sonia Gumbs-Luke, SEO, EMD, and Ms. Diana Fernandes, EOII, NRMD, attended a Land Use Workshop and Voluntary Guidelines Meeting, which was held during June 17-18 at the Grand Coastal Hotel and June 19-21, 2013 at the Princess Hotel.
14. Mr. Colis Primo, SEO, EMD, attended a consultation on the Standards and Weights and Measures Act of the GNBS, which was held on June 18, 2013 at the Regency Hotel, Georgetown.
15. Ms. Anzaleen Hoosein, EOII, EMD, attended the launching of PAHO/WHO Strategic Plan for 2014-2019 and the Program and Budget for 2014-2015 at the Ocean View International Hotel on July 04, 2013.
16. Mr. Colis Primo attended a workshop on the specification and labeling of commodities pt. 10. This workshop was organized by GNBS and held on July 08, 2013.
17. Ms. Geeta Singh, Director, EMD, attended a two (2) days Disaster Risk Management Bill Workshop, which was organized by CDC and held during July 18-19, 2013.
18. Ms. Teijvarti Persaud, SEO, EMD, attended a workshop organized by the World Wildlife Fund (WWF) at Cara Lodge on July 19, 2013.
19. Mr. Colis Primo, SEO, EMCD, Ms. Latoya Farinha, EOI, EMPD, and Ms. Aretha Forde attended a two (2) weeks programme on Water Resources Management, which was organized by University of Guyana and held during August 6 – 17, 2013.



20. Mr. Deuel Hughes, EOI, EITD, Ms. Malicia Hall, EO1, EMPD, Ms. Melinda Franklin, EOI, EMPD, Ms. Sharmin Joseph, EOI, EMPD, and Ms. Monique Williams, EOI, EMPD, attended a five day (5) workshop organized by GGMC held at Guyana Forestry Commission during August 15 - 19, 2013.
21. Ms. Anastasia Chandra, EOI, EMCD, Ms. Diana Fernandes, EO1, NRMD, Mr. Andrew Gupta, EOI, EMPD, Ms. Sonia Gumbs – Luke, SEO, EMCD, and Mr. Deuel Hughes, EITD, attended a two (2) weeks programme on Disaster Risk Management in the Caribbean during August 20 – 31, 2013.
22. Ms. Geeta Singh, Director, EMPD, Ms. Teijvarti Persaud, SEO, EMPD, Ms. Sharifah Razack, Director, EITD, and Ms. Aretha Forde, EOI, EITD, attended a two (2) day workshop on National Mining and Quarrying Conference held at Liliendaal Conference Centre during August 26 – 27, 2013.
23. Mr. Lancelot France Cummings, Finance Officer, and Ms. Fiona Marshall, Senior Accounts Clerk, attended a one (1) day workshop on New Accounting Practice Issues. This workshop was organized by the Institute of Chartered Accounts of Guyana and was held on August 30, 2013.
24. Mr. Colis Primo, SEO, EMCD, Ms. Felicia Adams, SEO, EMCD, Mrs. Sonia Gumbs-Luke, SEO, EMPD, Mrs. Teijvarti Persaud, SEO, EMPD, Ms. Shivon Caesar, Administrative Officer, Admin., Ms. Divinjali Bailey, Administrative Assistant, Admin., Ms. Debbie Wilkinson, Senior Accounts Clerk, Admin., Ms. Sharifah Razack, Director, EITD, and Mrs. Candacie Brower-Thompson, SEO, EITD, attended a two (2) day workshop on Creative Problem Solving and Analytical Thinking organized by Arthur Lok Jack held during September 05 - 06, 2013.
25. Mr. Lancelot France Cummings, Finance Officer, and Ms. Debbie Wilkinson, Senior Accounts Clerk, attended a one (1) day workshop on New Accounting Practice Issues. This workshop was organized by the Institute of Chartered Accounts of Guyana and held on September 11, 2013.
26. Ms. Geeta Singh, Director, EMPD, Mr. Colis Primo, SEO, EMCD, and Ms. Karen Alleyne, SEO, EMPD, attended a five (5) days assessment which was organized by Ministry of Foreign Affairs and held during September 16 – 20, 2013.
27. Mr. Dhanraj Persaud, Administrative Director, Mr. Ronley Kendall, Human Resources Officer, Ms. Sharifah Razack, Director, EITD, Ms. Geeta Singh, Director, EMPD, and Mr. Kemraj Parsram, Director, EMCD, attended a two (2) day Communications Training organized by the Ministry of Natural Resources and the Environment held during September 19 – 20, 2013.

28. Dr. Indarjit Ramdass, Executive Director, Mr. Kemraj Parsram, Director, EMCD, Ms. Geeta Singh, Director, EMPD, and Ms. Teijvarti Persaud, Senior Environmental Officer, EMPD, Ms. Saudia Sadloo, Environmental Officer 1, EMPD, Mr. Sean Mendonca, Senior Environmental Officer, NRMD, Mr. Jermaine Clark, Senior Environmental Officer, NRMD, and Mr. Rae Smith, Environmental Officer 11, NRMD, attended the National Toshaos Council Meeting which was organized by the Ministry of Amerindian Affairs during October 21 - 25, 2013.
29. Mr. Lancelot France-Cummings, Finance Officer, Admin., Ms. Debbie Wilkinson and Ms. Fiona Marshall, Senior Accounts Clerk, Admin., and Ms. Hollee Ragnauth and Ms. Dadre Bayley, Accounts Clerk, Admin., attended the ICAG at Pegasus Hotel during November 07 – 08, 2013.
30. Mrs. Sonia Gumbs-Luke, Senior Environmental Officer, EMPD, Mr. Delon Earle, Environmental Officer 1, EMPD and Ms. Malicia Hall, Environmental Officer II, EMPD, attended a two (2) days training workshop on the Guidelines for Incorporating Integrated Disaster Risk Management in Agricultural Planning and Environmental Management organized by the Civil Defence Commission (CDC) during November 12 – 13, 2013.
31. Ms. Darshini Seeram, Environmental Officer I, EMCD, attended a three (3) days workshop on Caribbean Disaster Risk Reduction and Climate Change in St. Vincent and the Grenadines during November 12 – 14, 2013.
32. Mr. Jermaine Clark, Senior Environmental Officer, NRMD, Mr. Rae Smith, Environmental Officer II, NRMD, Ms. Geeta Singh, Director, EMPD, Ms. Karen Alleyne, Senior Environmental Officer, EMPD, Mrs. Sonia Gumbs-Luke, Senior Environmental Officer, EMPD, Ms. Teijvarti Persaud, Senior Environmental Officer, EMPD, Mr. Kemraj Parsram, Director, EMCD, Ms. Felicia Adams, Senior Environmental Officer, EMCD, Ms. Tashana Redmond, Senior Environmental Officer, EMCD, Mr. Colis Primo, Senior Environmental Officer, EMCD, Ms. Sharifah Razack, Director, EITD, and Mrs. Candacie Brower-Thompson, Senior Environmental Officer, EITD, attended a one (1) day consultation on the Restriction of the use of Styrofoam on November 18, 2013.
33. Ms. Sharmin Joseph, Environmental Officer 1, EMPD, Mrs. Candacie Sobers, Environmental Officer II, EMPD, Mr. Andrew Gupta, Environmental Officer, EMPD, Ms. Monique Williams, Environmental Officer 1, EMCD, and Ms. Whoopi Liverpool, Environmental Officer 1, EMCD, attended a four (4) day workshop on Adaptation to Climate Change held during November 18 - 21, 2013.
34. Mrs. Sonia Gumbs-Luke attended a five (5) days workshop in Brazil on the Development of Infrastructure Projects organized by the Ministry of Foreign Affairs during November 25 – 29, 2013.
35. Ms. Tashana Redmond, Senior Environmental Officer, EMCD attended a one (1) day workshop on Reviewing the Draft Tourism Investment Guide organized by the Ministry of Tourism, Industry and Commerce on November 26, 2013.

36. Ms. Geeta Singh, Director, EMPD, Ms. Karen Alleyne, Senior Environmental Officer, EMPD, and Ms. Teijvarti Persaud, Senior Environmental Officer, EMPD, attended a one (1) day workshop on the Environment organized by CIDA on November 26, 2013.
37. Ms. Diana Fernandes and Ms. Stacy Lord, Environmental Officer II, NRMD attended a three (3) days workshop on the Nagoya Protocol during December 03 – 05, 2013.
38. Mr. Rae Smith, Environmental Officer II, NRMD, attended a one (1) day workshop on Protected Areas Commission (PAC) Gap Analysis on December 10, 2013.

**APPENDIX VII****ENVIRONMENTAL PROTECTION AGENCY  
STATEMENT OF FINANCIAL POSITION  
AS AT DECEMBER 31, 2013**

	<b>Note</b>	<b>G \$</b>	<b>G \$</b>	<b>2012 G \$</b>
<b>Non Current Asset</b>				
Tangible Fixed Assets	14		20,297,658	15,422,140
<b>Current Assets</b>				
Receivables	15	14,774,282		2,406,714
Cash at Bank	13	133,229,219		160,518,023
Cash in Hand		<u>5,836</u>		<u>76,100</u>
			<u>148,009,337</u>	<u>163,000,837</u>
Total Assets			<u>168,306,995</u>	<u>178,422,976</u>
<b>Equity</b>				
Government Contribution		18,761,221		14,000,000
Misc Inc/Donations		4,717,833		4,717,833
Accumulated Surplus		<u>84,159,559</u>		<u>84,508,581</u>
			107,638,613	103,226,414
<b>Non Current Liability</b>				
Deferred Income	5		3,766,313	10,588,066
<b>Current Liability</b>				
Suspense A/c			1,003,614	1,003,614
Payables	16			

	<u>55,898,455</u>	<u>63,604,882</u>
Total Equity and Liability	<u>168,306,995</u>	<u>178,422,976</u>

**Prepared**  
**By:**.....  
 Finance Officer

**Checked**  
**By:**.....  
 Administrative  
 Director

**Approved By:**.....  
 Executive Director