

ENVIRONMENTAL
PROTECTION
AGENCY,
GUYANA.

2018 ANNUAL REPORT

Ganges Street, Sophia, Georgetown, Guyana

225-5467-9/225-1218

www.epaguyana.org

epa@epaguyana.org

OVERVIEW



The Environmental Protection Agency (EPA) is the lead Regulatory Organisation for environmental management in Guyana. The Department of Environment, Ministry of the Presidency provides policy oversight for the operations of the Agency. The EPA is supported by two independent Board of Directors; the Environmental Protection Agency's Board provide Administrative guidance to enhance the Agency's operations, while the Environmental Assessment Board provides technical support for projects which require Environmental Impact Assessments (EIAs).

The Mandate 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”.

The Environmental Protection Act, cap. 20:05, Laws of Guyana, and associated Regulations, prescribes how the Agency functions. The Agency's mandate is expansive and interconnected, requiring collaboration with private, public sector and non-governmental organisations at the national and international levels.

The promotion public participation in the process of integrating environmental concerns in the planning for sustainable development is another key function.

OVERVIEW



The Agency is semi-autonomous and its main source of funding is through government subventions, however, revenue is garnered through payments for Environmental Permits. Additionally, the Agency execute a number of projects through its Bilateral and Multilateral Environmental Agreements. For the year 2018, G\$449,452,000M was received from the government as Subvention, while, the revenue generated by the Agency was G\$107,000,811M.

Some of the EPA's major accomplishments in 2018, include processing of 842 permits a 70% increase over that issued in 2017. Additionally, Permits granted for Short-term Noise emissions in 2018 increased by 61% over those issued in 2017 and 81 % over those issued in 2016. The Agency has also finalised its 'Strategic Plan' to guide its operations for 2018-2022. Further, a cost-recovery mechanism was developed to allow greater financial self-sufficiency in the execution of its mandate. In 2018, an internal audit was also conducted which unearthed approximately 879 expired permits.

Additionally, structural works for both the (3) three storey central building and Regional Office in Whim, Region 6 were completed. The Agency also sought to elevate public education and awareness through the launch of a TV programme focused on environment, "The Environment Matters" and the Agency's first Environmental magazine " The Green Note".

Further, there was the implementation of EU-FLEGT Project: Providing Capacity Building Assistance to Community Forest Organisations (CFOs) on the on the Environmental Authorisation process in Guyana and the Darwin Initiative: Integrating Traditional Knowledge (TK) into National Policy and Practice Project commenced. Additionally, in October 2018, the Agency changed management with the confirmation of Energy and Petroleum specialist, Dr. Vincent Adams, as the new Executive Director

2018 highlights

MAJOR ACCOMPLISHMENTS

Environmental Authorisation

In 2018, the EPA received a total of nine hundred and twenty-six (926) applications for Environmental Authorisation, a fifty-eight percent (55.8 %) and sixty-six percent (66%) increase in applications received compared to 2017 and 2016, respectively. Specifically, in 2018 applications for New, Existing Projects and Renewal of Authorisation increased by thirty-six percent (36%) compared to 2017 and a sixty-five (65%) percent compared to 2016.

Further, the total of 842 Permits were granted in 2018, an increased of 70% over that issued in 2017 and 205% over that issued in 2016.

Compliance and Enforcement

Complaints

The Agency received a total of three hundred thirty-nine (339) new complaints for the year 2018. There were also two hundred sixty-nine (269) recurring complaints. One hundred and ninety-five (195) complaints were received for 2018 regarding emissions of air contaminants affecting human health and the quality of the environment.

Complaints Investigated

One hundred and fifty six (156) complaint investigations were conducted for the year.

Compliance

Compliance audits were conducted by the Agency to ensure developers were abiding by the tenets of their Environmental, Construction and or Operational Permits. Compliance Audits were done in the areas of Forestry, Lumber yard and Sawmills operations and Gas stations. The Agency has commenced formulation of a strategy which will be finalised in 2019 in address approximately 630 plus permits which are at various stages of non-compliance.

Enforcement

The Agency took enforcement action against five (5) operators where prohibition notices were served to the polluters to immediately cease their unauthorised operations. The operations included three (3) swine farms, one (1) poultry operation and one (1) spray painting workshop. Two (2) of the operations have since complied and injunction proceedings were filed for the non-compliant polluter.



2018 highlights

MAJOR ACCOMPLISHMENTS

Improving Organisational and Administrative Capabilities

Strategic Planning – The Agency has finalised its strategic plan to guide its operations for 2018-2022. Integral to the strategic plan is aligning the EPA's operations consistent with the emerging oil and gas sector and the national objectives as an evolving green state.

Cost Recovery – A cost recovery mechanism was developed to allow greater financial self-sufficiency in the execution of its mandate.

Strengthening Compliance and Enforcement – The Agency conducted an internal audit which unearthed 879 expired permits. Consequently, a robust and comprehensive strategy is being developed to aggressively pursue and bring delinquent operators into compliance in 2019. This is necessary to ensure the environment is adequately protected and health and well-being of the people are not compromised.

New Buildings - In 2018, structural works for both the (3) three storey central building and Regional Office in Whim, Region 6 were completed. Both buildings are expected to be fully furnished and occupied in 2019.

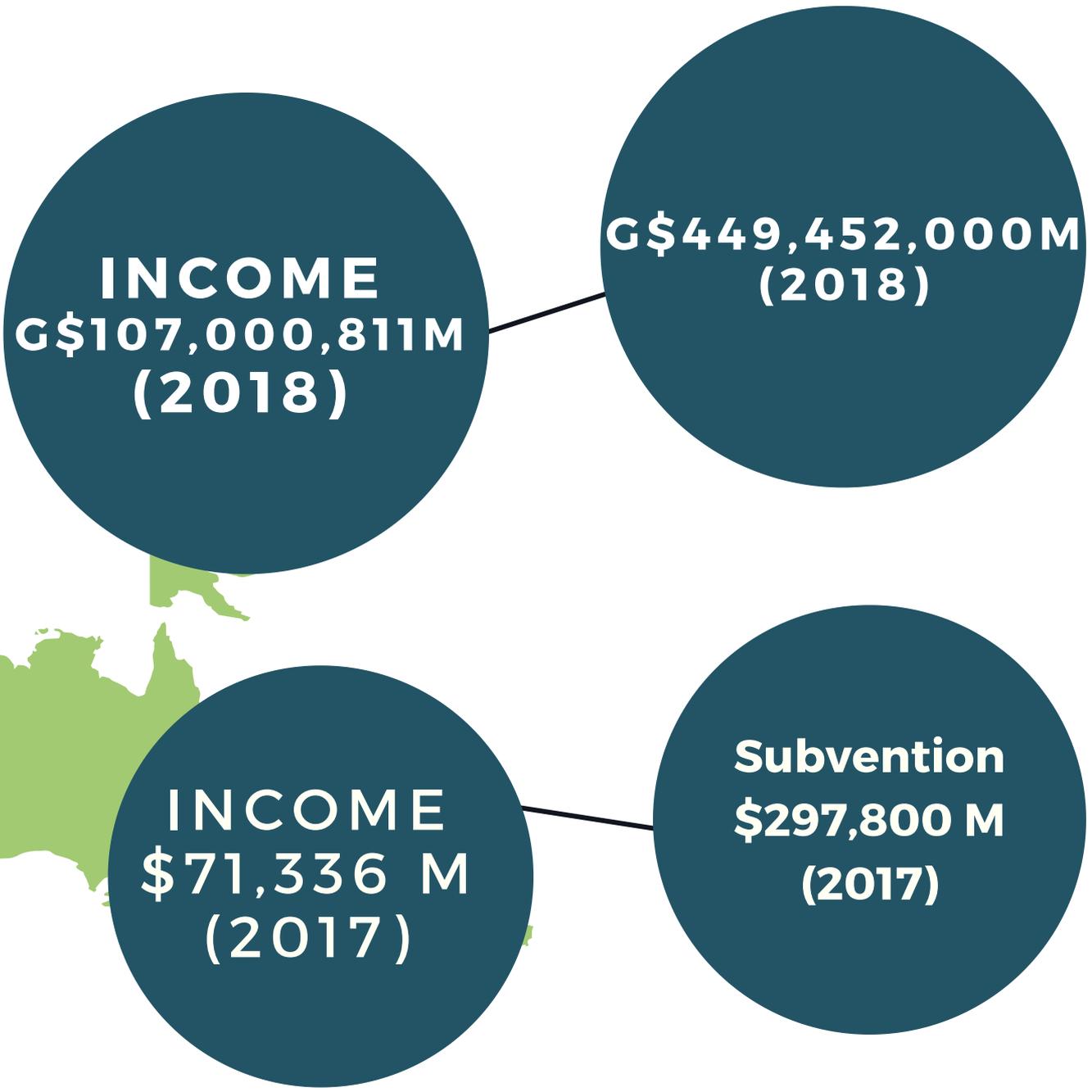
This is in keeping with the Agency's strategic objective of improving the effectiveness of its regulatory functions and improve public confidence in the work of the Agency through decentralisation, robust but fair operations and efficient service.

Improving public awareness and education – EPA's Magazine/TV programme

Acquiring and disseminating pertinent information is critical to environmental management and the sustainable use of natural resources and integral to the work of the Agency.

Consequently, in 2018, the Agency sought to boost its education and communication platforms through the launch of the first television programme to focus exclusively on matters of environment and human health. Dubbed "The Environment Matters", this programme aims to be relevant, impactful and tailored for a wide cross section of the Guyanese populace.

There is currently one episode recorded per month and broadcasted 4 times on NCN TV stations across the country..



INCOME
G\$107,000,811M
(2018)

G\$449,452,000M
(2018)

INCOME
\$71,336 M
(2017)

Subvention
\$297,800 M
(2017)

FINANCIAL ANALYSIS

For the year 2018,
G\$449,452,000M was received
from the government as
Subvention, while, the revenue
generated by the Agency was
G\$107,000,811M.

2018 highlights

MAJOR PROJECTS

EIA Projects

The following projects are actively involved in the EIA process:

- Romanex Guyana Exploration Ltd.;
- Esso Exploration and Production Guyana Limited, Liza phase 2;
- RL Sookram and Sons Sawmilling Industry; and
- East Bank-East Coast Road linkage project.

Other Projects

The Environmental Protection Agency in 2018 continued in juxtapose its operations congruent with the Guyana's Green State development strategy and the country's growing developmental needs.

To this end, the Agency executed a number of projects, some of which were through Multilateral Environmental Agreements and other partnerships.

Darwin Initiative: Integrating Traditional Knowledge (TK) into National Policy and Practice Project:

With support from the Darwin Initiative the Agency is implementing the "Integrating Traditional Knowledge into National Policy and Practice in Guyana" project to provide policy-level guidance, capacity development and research-led experience for incorporating traditional knowledge into conservation and sustainable development decision-making, monitoring and policy.

EU FLEGT Project: Providing Capacity Building Assistance to Community Forest Organisations (CFOs) on the on the Environmental Authorisation process in Guyana."

The Environmental Protection Agency (EPA) has received funding under the FAO-EU FLEGT Programme to execute the project, "Providing Capacity Building Assistance to Community Forest Organisations (CFOs) on the on the Environmental Authorisation process in Guyana."

This project which commenced in August 2018, aims to utilise awareness and capacity building as a means of supporting Forest Operators on the process involved in obtaining an Environmental Authorisation in accordance with the Environmental Protection Act, Cap 20:05, Laws of Guyana and the EUFLEGT-VPA legality definition (Annex11).

This initiative involves a series of exploratory meetings in all relevant Administrative Regions followed by workshops with the identified stakeholders. Further, 69 CFOs are targeted for this project with the goal of having 70% of CFO operations permitted by the end of the project. To this end, the Agency has engaged ninety nine (99) Community Forest Operators, Youths, women and community leaders in workshops in Regions 10, 2 and 1. The Agency will continue implementation of the project in 2019 in Regions 3,4,6,7 and 9.



2018 highlights

RESEARCH & DEVELOPMENT

The Agency continues to place high emphasis on research and development to improve its operations. To this end, some interventions in this area were;

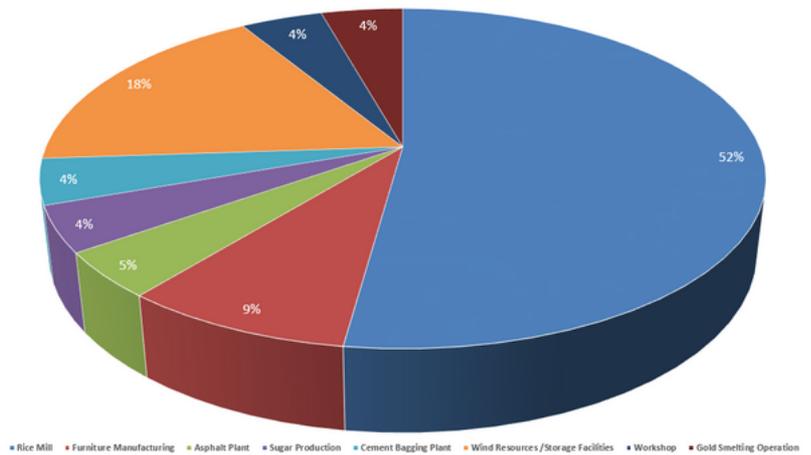
- Development of Operation Permits for Interim Waste Management Sites.
- Guidelines for Management of Interim Waste Management Sites were drafted.
- Drafted Guidelines for collection, transportation and disposal of (non-hazardous) solid waste.
- Collaborated with the Ministry of Business, Scrap Metal Unit for making Environmental Authorisation compulsory for renewing of scrap metal license.
- Prepared a Monitoring Plan for Effluent Discharge in Eccles, Ruimveldt and Coldingen Industrial Sites.
- Developed a Guideline for Handling, Treatment and Disposal Septage Sludge.
- Use of the Gaussian model to estimate emissions from these plants and hazard quotients based on human inhalation rates to assess the potential human health risk.
- Collaborated with the Pesticide and Toxic Chemical Board (PTCCB) in a pesticide spraying operation from which fugitive emissions were affecting a community.
- Collaborated with Guyana Geology and Mines Commission (GGMC) on a project examining the impact of mining on riverine communities, specifically the presence of mercury in the Demerara and Essequibo rivers and their river beds.



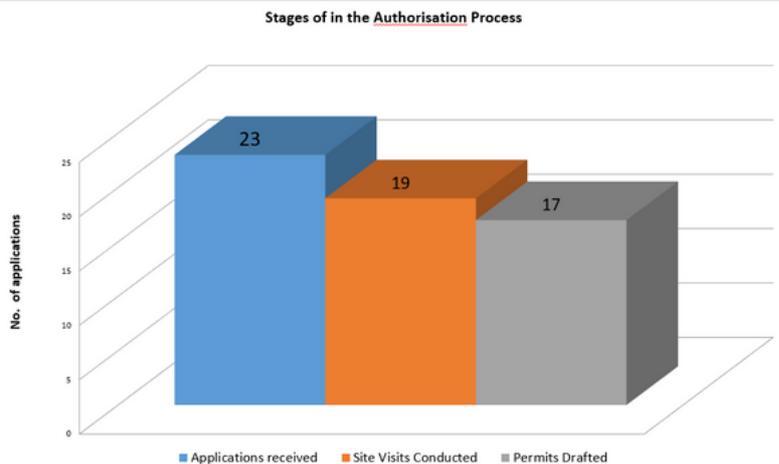
AIR QUALITY & NOISE MANAGEMENT

Air Quality and Noise

Twenty-three (23) applications were received for the year for projects likely to emit air contaminants were processed by the Agency. Nineteen (19) site visits were conducted and seventeen (17) Permits drafted. Please refer to graphs 1 & 2 below).



Graph 1: Showing authorisations received for facilities emitting air contaminants.

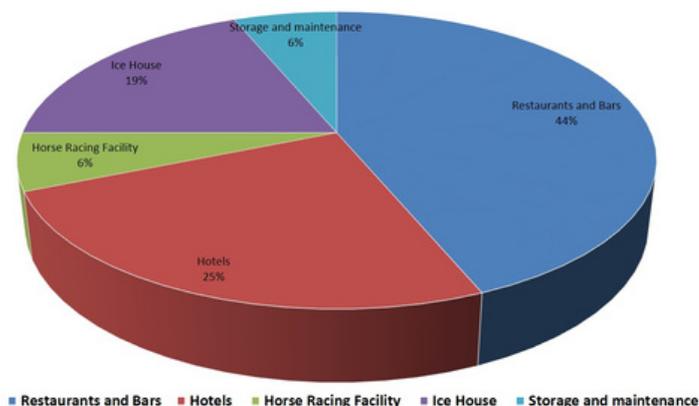


Graph 2: Showing site inspections conducted and permits issued for facilities that emit toxic air pollutants.

AIR QUALITY & NOISE MANAGEMENT

Noise

Fifteen (15) applications were received for the purpose of Environmental Authorisation related to noise. A total of seven (7) applications were for restaurant and bars, four (4) for Hotels, one for a Horse Racing facility, three (3) for Ice Houses and one Storage and Maintenance facility.

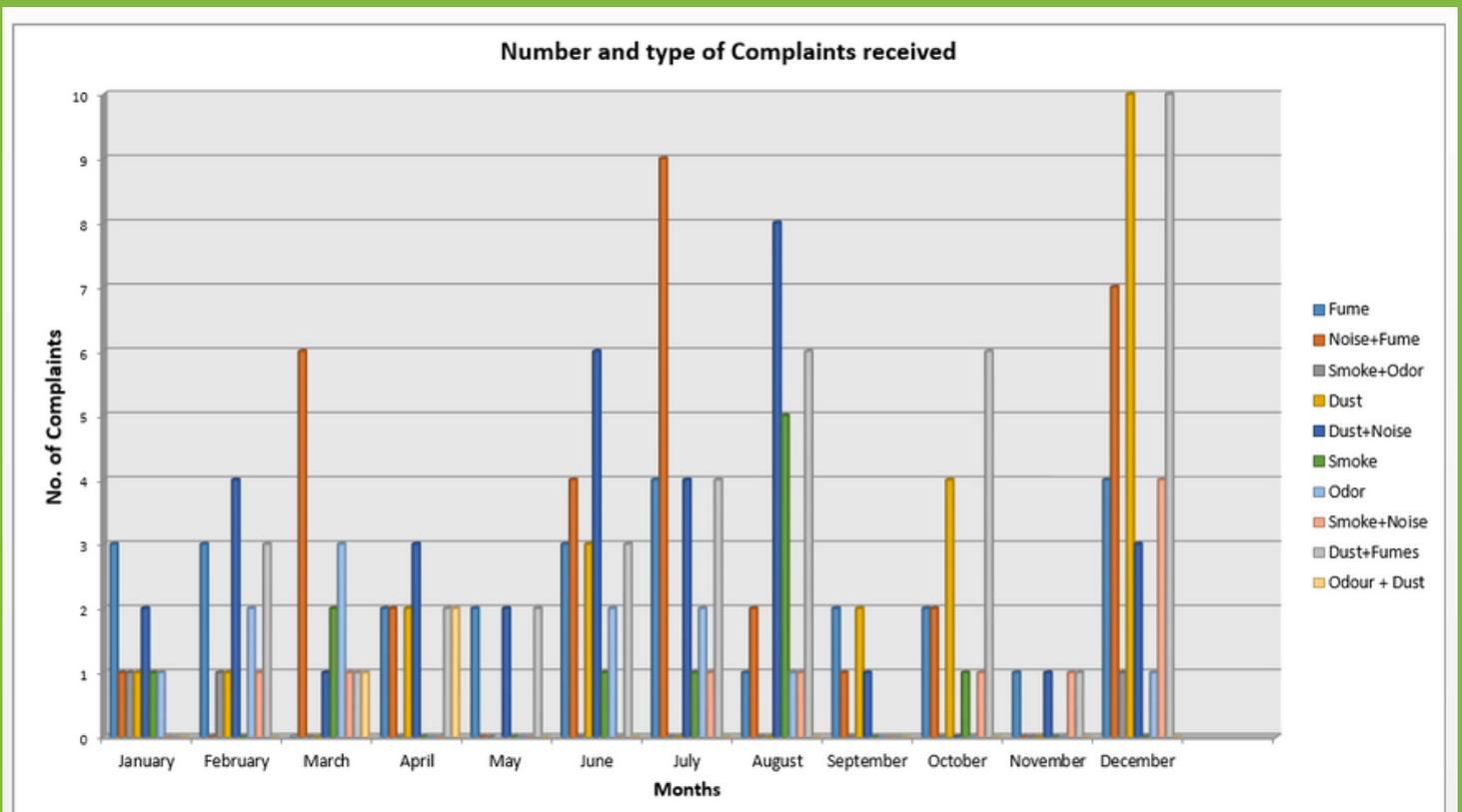


Graph 3: Distribution of applications received for issuance of permits of facilities emitting noise.

Air Quality Monitoring

Officers of the Programme responded to complaints regarding air pollution by conducting eight (8) air quality monitoring exercises for facilities in Region 2, 4, 7 and 10, which included an aluminium smelting operation located opposite the Taymouth Manor Primary on the Essequibo Coast.

Tests were conducted for (Volatile organic compounds, carbon monoxide, hydrogen sulphide, nitrous oxides and nitrogen dioxide) use the Multi Rae Gas Detector and Particulate Matter (PM2.5) using the EPAM 5000 (Environmental Particulate Air Monitor) Equipment. In the case of Taymouth Manor Primary School, monitoring results indicated that carbon monoxide (CO) was present at concentrations above the WHO[T1] limit of 0.1 ppm for any 15 minute period.



Graph 4: Distribution of applications received for issuance of permits of facilities emitting noise.

COMPLAINTS MANAGEMENT

Complaints Received

- The Programme Area received two hundred and twenty five (225) complaints for 2018 with regards to noise emissions into the environment.

Complaints Investigated

- One hundred and seventy nine (179) complaint inspections were conducted.

- Twenty –seven (27) were related to noise and fumes, one hundred and forty one (141) for noise only, thirty nine (39) for noise and dust, six (6) for dust, noise and fumes, three (3) for noise and waste management and nine (9) for noise, smoke and odour.

- Noise emissions were for bars, restaurants, hotels, furniture, welding and auto body workshops, bitumen operations, operation of generators and construction related activities.

NOISE ASSESSMENTS

Four (4) extensive noise monitoring exercises for facilities were conducted in Region 2, and 4, which included two (2) Hotel, Restaurant and Bars, a call centre and a wind turbine.

Tests were conducted for extensive periods ranging from six (6) to twelve (12) hours using the Reed 8080 Sound Level Meter.

SELF-MONITORING AND REPORTING

For 2018 the program reviewed approximately eleven (11) annual, biannual and quarterly reports relating to noise emissions. Many of the reports provided baseline data for the operations and showed compliance under the Noise Management Regulations, 2000.

RADIATION

Environmental Authorisations

The Programme received two (2) applications for the purpose of Environmental Authorisation relating to radiation. One (1) for Cancer Institute of Guyana and one (1) for Halliburton Guyana Inc. to use, store and transport radioactive sources.

RADIATION MONITORING

The Agency conducted assessment at the Guyana National Industrial Corporation (GNIC) relating Guyana Revenue Authority (GRA) mobile container scanner. The inspection revealed that ionizing radiation used for container scanner may cause health hazards to the operators and bystanders, if not handled properly, or due to inadequate safety systems in the equipment.

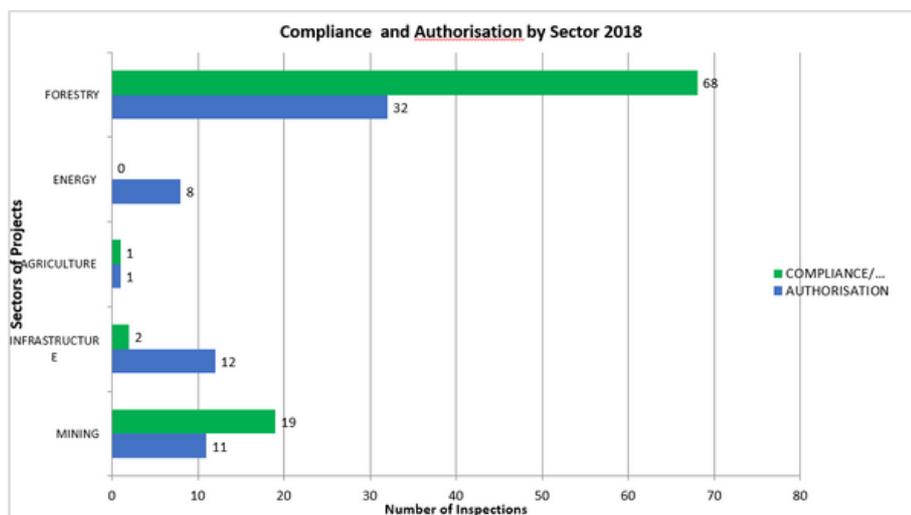
LAND RESOURCES MANAGEMENT

A total of one hundred fifty four (154) projects were managed (see graphs below) in five areas; mining, infrastructure, agriculture, energy and forestry.

Inspections

Sixty-four (64) inspections were conducted for projects requiring Environmental Authorisation for new and existing projects while ninety (90) were conducted for projects that were non-compliant, requiring follow-up actions, complaints regarding the areas under our preview and audits inspections for the renewal of Environmental Authorisation.

The PA have permitted a total of one hundred (100) forestry projects for the period January to December 2018. This includes forty four (44) lumber Yard (with and without processing), twenty eight (28) sawmill, twenty one (21) portable mills, five (5) log depots and two (2) charcoals operation.



Graph 5: Compliance and Authorisation by sector 2018

LAND RESOURCES MANAGEMENT

Mining

Under mining the PA have permitted a total of thirty (30) projects including sand and loam mining, bauxite gold and diamond and quarry operation.

Infrastructure

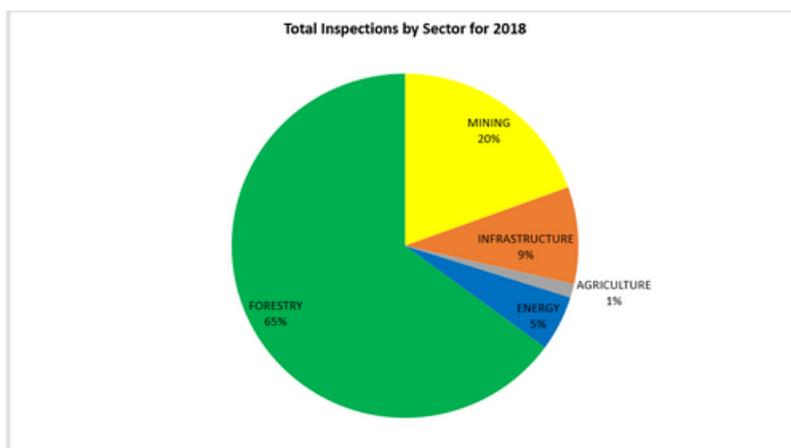
For infrastructure the PA have permitted a total of fourteen (14) projects which includes sluices, water conservancies, bridges roads, wharf, heliport, airstrip, schools and agriculture stations.

Agriculture

For agriculture sector, two (2) projects, a farm and an agriculture station were permitted.

Energy

Additionally, the PA have permitted a total of eight (8) energy related projects which include but are not limited to solar photovoltaic, fuel storage and gas stations, hydroelectric power dam etc..



Graph 6: Inspections by sector 2018

EUFLEGT Project

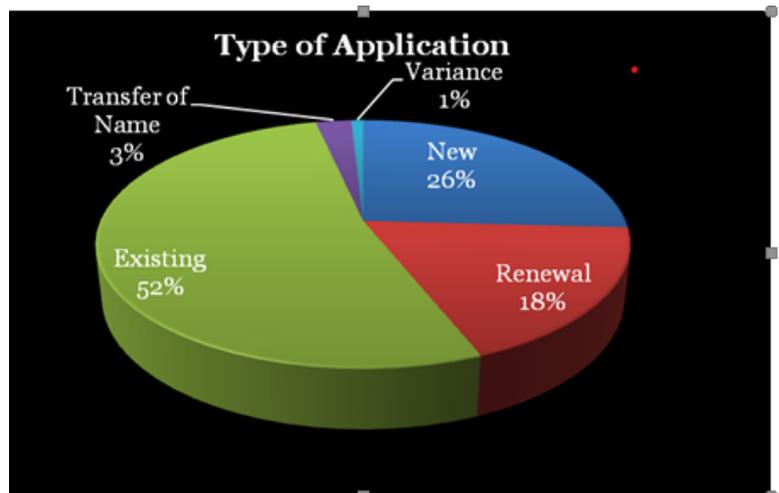
The PA would have successfully submitted proposal and received funding from the FAO-EUFLEGT for the project “Providing Capacity Building Assistance to Community Forest Organizations (CFOs) on the Environmental Authorisation process in Guyana”.

This project will allow for increase application for Environmental Authorisation in the forestry sector with specific emphasis on Community Forest Organisations.

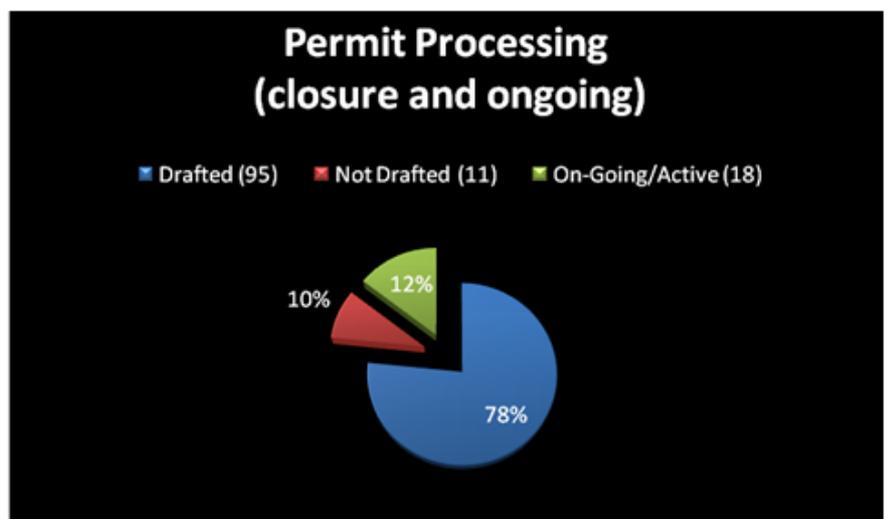
WASTE MANAGEMENT

Authorisation

One hundred and twenty-four (124) applications for Environmental Authorisation were received relative to Waste Management and ninety-five Permits prepared. 26% were for new applications, 18% Renewals, 52% for existing projects, 1% was relative to Variance, and 3% accounted for transfer of ownership. Moreover, Fuel storage accounted for 33.9% of the applications, this was followed by Gas Stations which accounted by 18.5% of applications.



Graph 7: Applications received

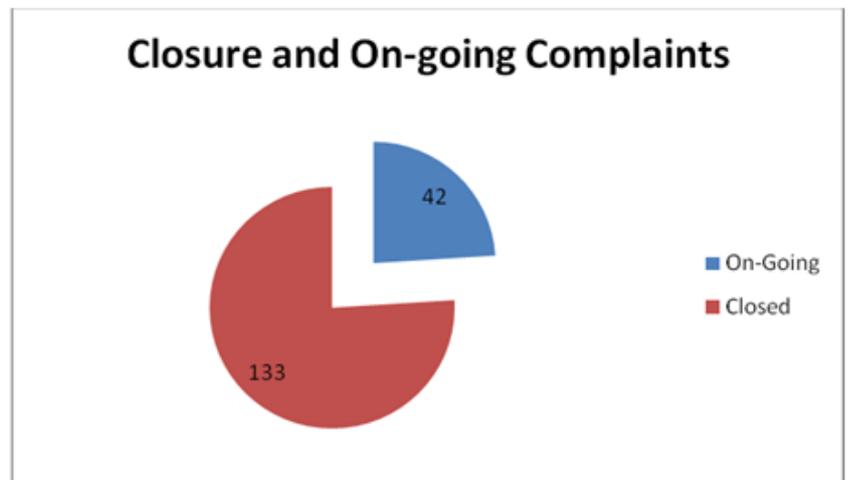


Graph 8: Permits processed

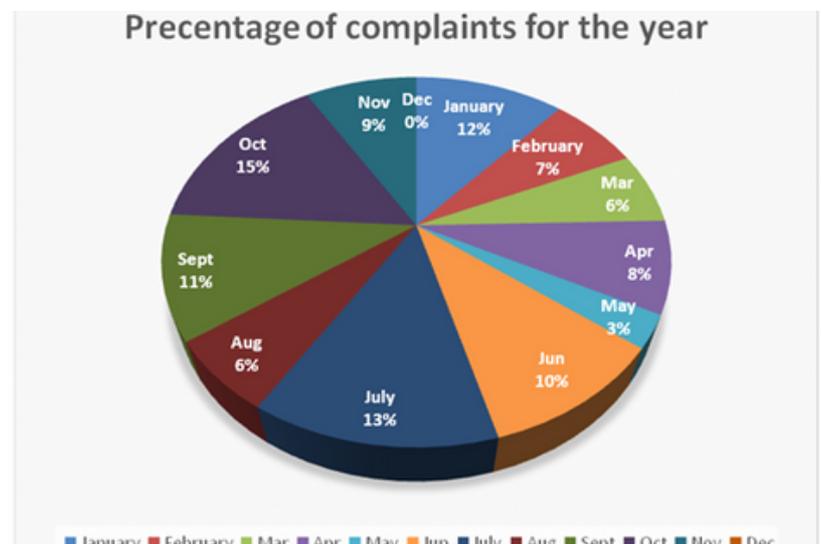
WASTE MANAGEMENT

Complaints

One hundred and seventy-five (175) complaints fell into this category. Furthermore, approximately eighty-four (84) were litter offences, while the remaining ninety-one (91) complaints were as a result of poor waste management practices in operations such as poultry and livestock rearing and medical facilities. Approximately seven (7) complaints received were considered significant due to close proximity to residents and resulting impact to human health and the environment. These significant complaints occurred in regions 4 and 5 and consisted of Swine Rearing Operations (2), Medical Facilities (3), Poultry Operations (1) and litter complaint (1). 78.2% of the complaints received were new and 21.8% were reoccurring. 76% of all complaints received during the reporting period were closed



Graph 9: Complaints closed



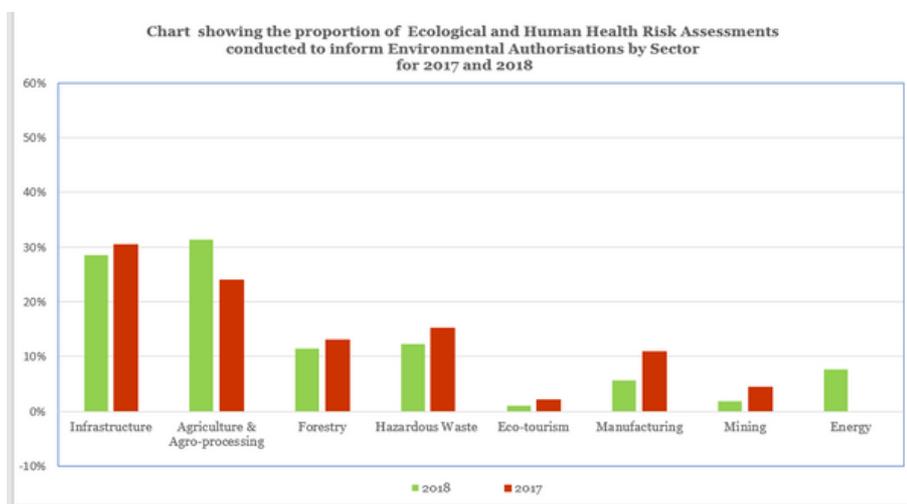
Graph 10: Complaints closed

ECOLOGICAL & HUMAN HEALTH RISK (EHHRA)

EHHRA was established in March of 2017. In April 2017, the program area commenced 'Risk Assessments' and by December of 2017, completed forty-six (46) Risk Assessments to inform Environmental Authorisations and eighteen (18) with regard to complaints.

During 2018, EHHRA conducted one hundred five (105) Risk Assessments to inform Environmental Authorisations and forty eight (48) complaints. From 2017 to 2018, the number of authorisations and complaints increased by 54 and 63 percent, respectively.

Although there was an increase in the number of Risk Assessments conducted, with the exception of the energy sector, there was no real difference in the proportion of Risk Assessments in the sectors assessed towards authorisations in 2017 and 2018, see Chart 1, showing the percentage of risk assessments conducted in 2017 and 2018 by sector.



Graph 11: Risk Assessments to inform Environmental Authorisation by sector for 2017 and 2018

ECOLOGICAL & HUMAN HEALTH RISK

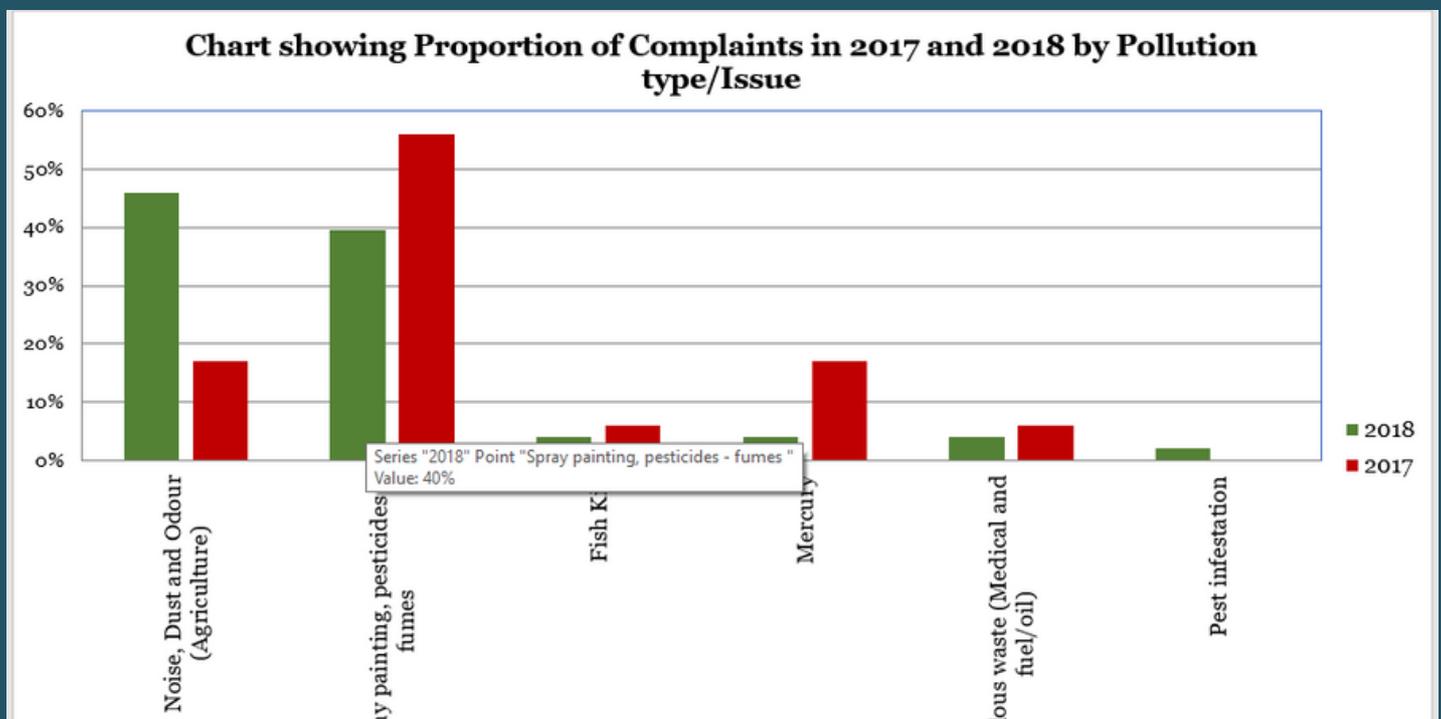
Environmental Complaints Assessment

63%

increase from 2017

29%

*decrease in pesticide and
spray painting
complaints.*



Graph 12: Risk Assessments to inform Environmental Authorisation by sector for 2017 and 2018

The main sources of complaints in 2017 and 2018 came from dust, noise and odour largely due to the agricultural sector, and the spraying of pesticides and paint, see chart 2 above, showing complaints assessed by pollution type.

The assessment of complaints regarding noise, odour and dust increased proportionally by 63 percent from 2017 to 2018. However, assessments of pesticide and spray-painting complaints decreased by 29 percent in 2018.

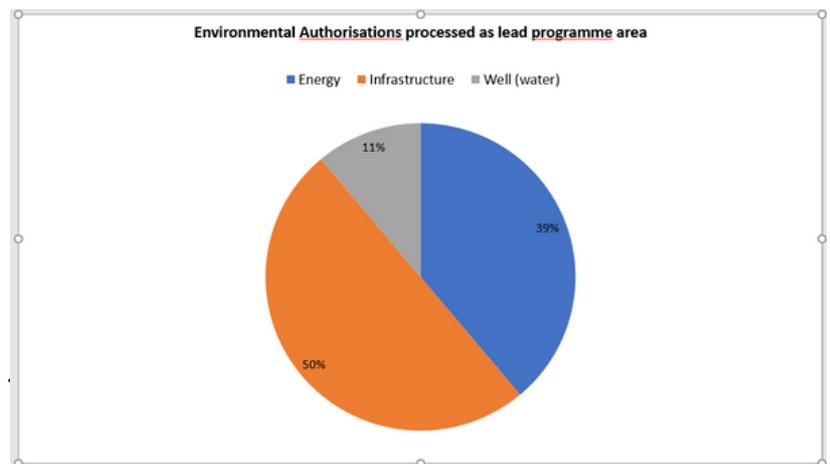
In 2018, EHHRA led 68 percent of the complaints assessed, this could be attributed to the fact that 85 percent of the complaints assessed originated from residents identifying human health as the main reason for contacting the Agency.

In 2018, EHHRA collaborated with the Pesticide and Toxic Chemical Board (PTCCB) in a pesticide spraying operation from which fugitive emissions were affecting a community. EHHRA, along with other program areas of the Agency collaborated with Guyana Geology and Mines Commission (GGMC) on a project examining the impact of mining on riverine communities, specifically the presence of mercury in the Demerara and Essequibo rivers and their river beds

WATER QUALITY MANAGEMENT (WQM)

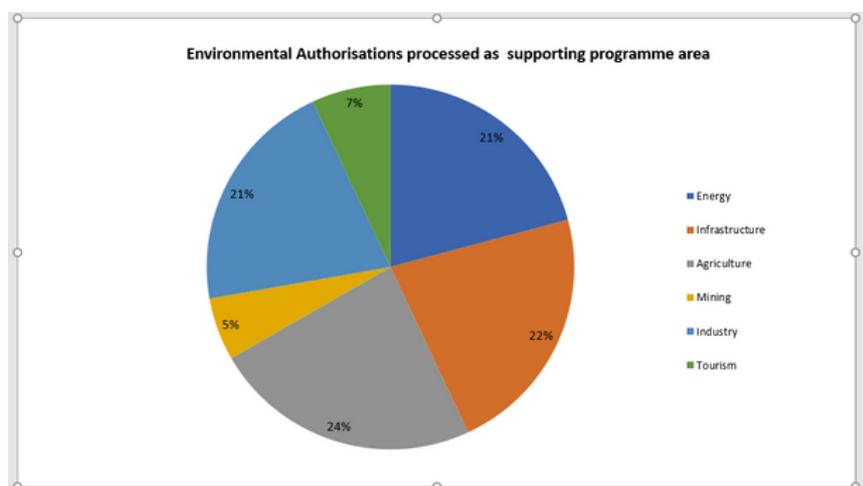
The Water Quality Programme Area (PA) processed eighteen (18) Environmental Authorisations as the Lead Programme Area.

Three (3) sectors were processed. This demonstrated an increase of 157.1% increase over 2017.



Graph 13: Environmental Authorisations process as Lead PA

The PA also supported the processing of in seventy two (72) inspections representing an increase of 10.7% over 2017. The four main sectors that were inspected were Agriculture (24%), Infrastructure (22%), Energy (21%) and Industry (21%).



Graph 14: Environmental Authorisations process as support PA

WATER QUALITY MANAGEMENT

WQM Response to Environmental Complaints

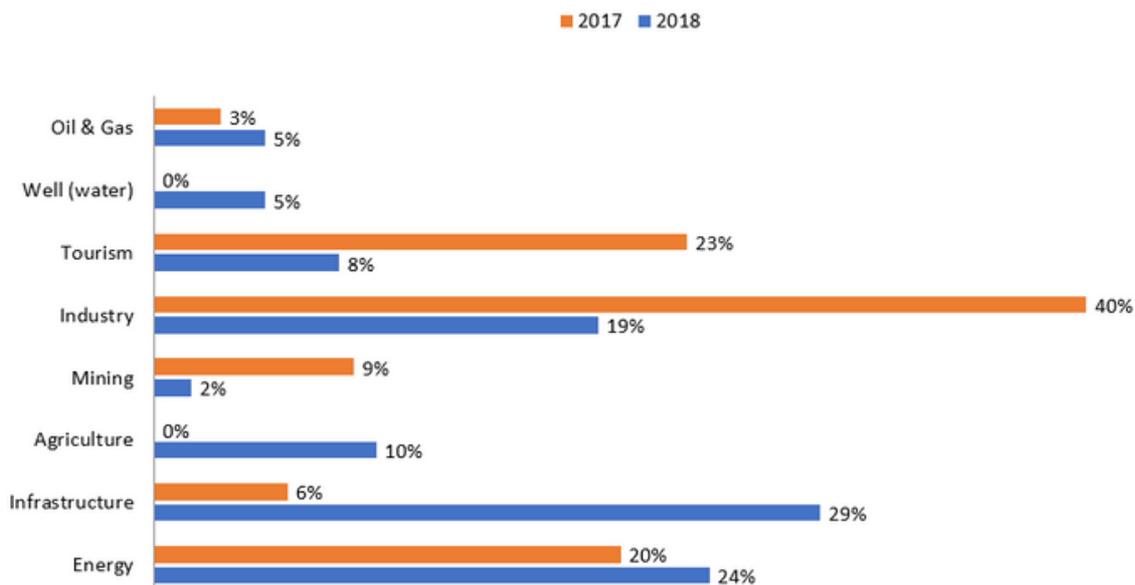
41%

*related to waste oil
disposal*

25%

*related to effluent
discharge*

Comparison between sectors for permits conditions prepared in 2017 and 2018 by WQMP



Graph 15: Comparison of 2017 & 2018 Permit conditions

WQMP investigated a total of twenty one (21) complaints for the year. A total of twelve (12) complaints came directly to WQMP and nine (9) were complaints investigated to assist other project areas. Improper disposal of waste oil is the main complaint in 2018 (41%), followed by effluent discharge (25%) into water ways. This represents a 110% increase of complaints inspected.

Completed sampling and analysis of 8 Rivers (Demerara, Ireng, Pomeroun, Mahaica, Mahaicony, Abary, Waini, Canje).

Participated in a rapid assessment of the Demerara River with the Guyana Geology and Mines Commission to assess carrying capacity of the River for mining activities.

Participated in a mercury assessment with the Guyana Geology and Mines Commission (GGMC), assessing mercury in water, air and sediments, in Bartica.

Participated with GGMC to carry out baseline water quality assessments in two other areas Dakoura Creek, and Kaituma.

Prepared a Monitoring Plan for Effluent Discharge in Eccles, Ruimveldt and Coldingen Industrial Sites.

Developed a Guideline for Handling, Treatment and Disposal Septage Sludge.

a year's overview

ENVIRONMENTAL ANALYTICAL SERVICE (EAS)

In order to continuously streamline operations within EAS, and foster effective collaboration and coordination with other Programme Areas and external laboratories, two Standard Operating Procedures (SOPs) were created.

1. Internal Coordination and collaboration between EAS and Technical Programs.
2. External Coordination and collaboration between EAS and External laboratories.

EAS also developed Standard Operating Procedures (SOP) on the use and calibration of several pieces of Portable Laboratory equipment maintained by the Agency as follows:

1. HACH CONDUCTIVITY PROBE
2. HACH PORTABLE TURBIDIMETER 2100Q
3. HANNA HI 9829 MULTIPARAMETER METER
4. KESTREL 4500 NV POCKET WEATHER TRACKER
5. REED R8080 SOUND LEVEL METER
6. REED SC-05 SOUND LEVEL CALIBRATOR
7. ROYCE TOTAL SUSPENDED SOLIDS INTERFACE LEVEL ANALYZER
8. SKC ENVIRONMENTAL PARTICULATE AIR MONITOR

The Terms of Reference (TOR) to hire a consultant for the planning of the Guyana Environmental Protection Agency Laboratory (GEPAL) to meet local and international laboratory standard was drafted.

Outsourcing of Laboratory Analysis

EAS collaborated with the WQMP to outsource samples of surface water for the CFLI Project to Kaizen Laboratory. The tests included general water parameters such as pH and turbidity, Oil and Grease and Trace Metals.

The PA also collaborated with Waste Management Programme to outsource samples of suspected heavy fuel to both Kaizen and IAST laboratories. The tests were for heavy metals and oil and grease.

Water samples from Guysuco's Ogle location was outsourced to IAST laboratory for Chlorine, Mercury and Heavy Metals testing in November 2018 after a reported fish kill.

A survey of all non-medical laboratories in Guyana approved by GNBS was conducted and a matrix of the results was compiled in 2017. These results were updated in 2018. The matrix includes the kind of tests that can be done, the analysis that can be tested and the cost associated with these tests.

a year's overview

LEGAL SERVICE(LS)

The Legal Unit has rendered support throughout the various Programme Areas, by providing legal advice, opinions, reviews, drafting of documents, contracts and correspondences.

Major accomplishments

- Draft Environmental Guidelines for Asphalt Plants;
- Reviewed and finalised Access to Genetic Resources and Benefits Sharing (ABS) Regulations;
- Preparation of Cabinet Memo on the Proposed Ban on Single-Use Plastic Products, which was subsequently presented to Cabinet by DoE and EPA.

Court Matters

The Agency has three (3) on-going matters engaging the attention of the High Court.

Provided guidance for addressing Complaints matters. Many of the complaints were related to poultry and swine rearing operations which posed numerous odour nuisances and pollution of the environment.

There were also issues relative to improper disposal of waste as well as, air and noise nuisances from spray painting operations.

The Unit also contributed to the development of proposed template letters to complainants [in response to their complaints] and permit holders [in relation to their failure to submit applications for renewal of the Environmental Authorisations.

Inter-Agency collaboration

MARAD

EPA representatives were engaged in a meeting at the Maritime Administration Department (MARAD) to discuss issues relating to ballast water management, port reception facilities and double hulled tankers.

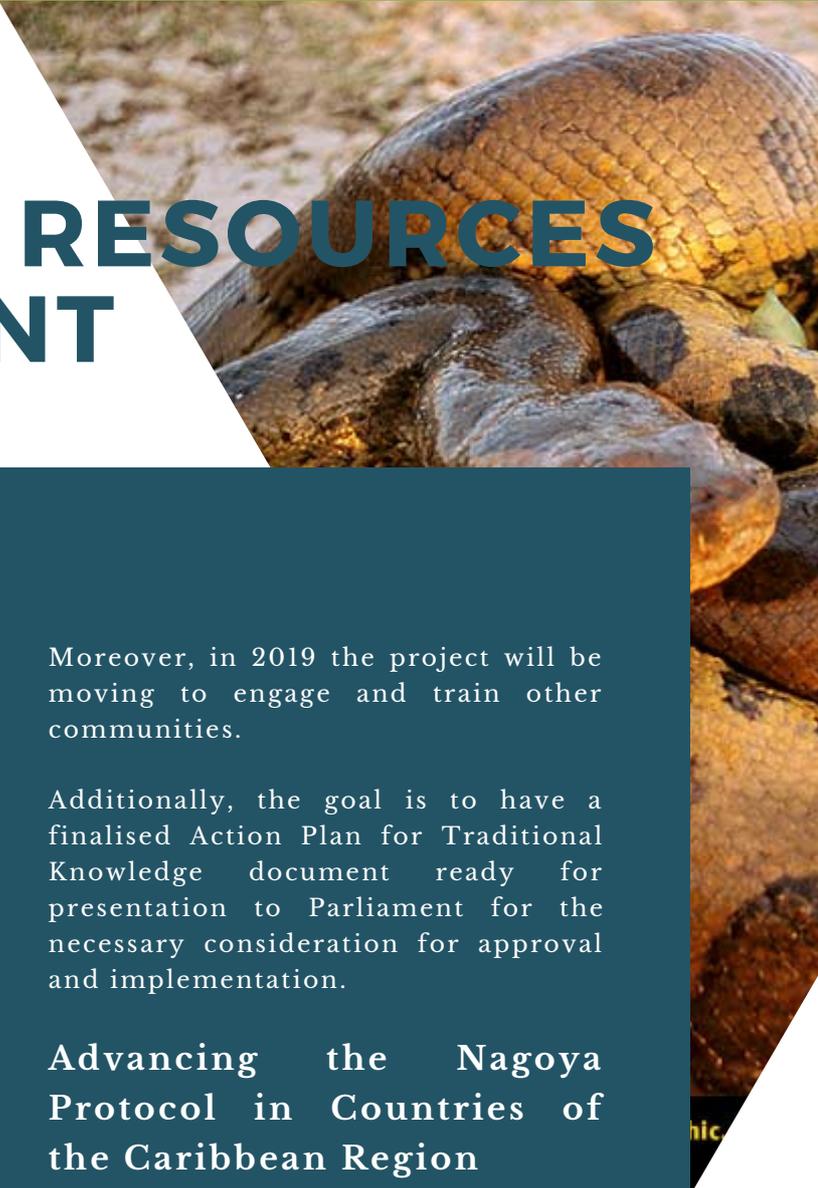
Ministry of Foreign Affairs

The Agency participated in the review of Maritime Zones Act, Cap. 63:01 being coordinated by the Ministry of Foreign Affairs.

Prohibition Notices were issued to an autobody workshop; two (2) swine rearing operations; and one (1) poultry operation.

a year's overview

BIOLOGICAL RESOURCES MANAGEMENT



Darwin Initiative Project

With support from the Darwin Initiative the Agency is implementing the “Integrating Traditional Knowledge into National Policy and Practice in Guyana” project. The project aims to provide policy-level guidance, capacity development and research-led experience for incorporating traditional knowledge into conservation and sustainable development, decision-making, monitoring and policy.

In 2018 the project facilitated community-based training for the preparation of Participatory Video on Traditional Knowledge incorporation into Protected Areas (PA) Management.

Communities associated with the Protected Areas of Region 9 (i.e. Iwokrama, Kanuku Mountains and Kanashen) produced videos that were screened to policy makers in Georgetown for their response.

During 2018, an Action Plan for Traditional Knowledge was also drafted.

Moreover, in 2019 the project will be moving to engage and train other communities.

Additionally, the goal is to have a finalised Action Plan for Traditional Knowledge document ready for presentation to Parliament for the necessary consideration for approval and implementation.

Advancing the Nagoya Protocol in Countries of the Caribbean Region

The goal of this project is to support countries in the Caribbean to facilitate access to their genetic resources and to ensure fair and equitable sharing of benefits arising from their utilisation. More specifically, the project seeks the uptake of the Nagoya Protocol and the implementation of key measures to make the Protocol operational in Caribbean Region.

Further, the project aims to overcome barriers linked to poor understanding of the Nagoya Protocol and Access and Benefit Sharing (ABS) as well as, the implications of ratification and the requirements for implementation.

a year's overview

BIOLOGICAL RESOURCES MANAGEMENT

Access to Genetic Resources & Benefits sharing (ABS)

During 2018, the draft ABS regulations were revised to ensure that it fell within the ambits of the Environmental Protection Act and there were no issues of concurrent jurisdiction. The revision was also to ensure that consideration for Prior Informed Consent and Mutually Agreed Terms were included. The project also facilitated production of awareness materials such as an ABS documentary and ABS sign at ports of entry.

NBRIS

The National Biodiversity Research Information System (NBRIS) also benefitted from an upgrade that allows it to be more user-friendly.

In 2019, it is expected that there would be the hosting of a Caribbean ABS Week, where a Ministers of Environment meeting is to be held to (CBD) to discuss the regional implications of trans-boundary issues related to the access and benefit sharing from the genetic resources in the region along with other technical, policy and administrative matters related to ABS.

The development of Business Model for ABS, ABS community outreaches and development of Regional ABS website and database are activities to be completed in 2019 before the project is closed.

Establishment of the Coastal and Marine Management Committee (CMMC).

The committee's intent is to the shape the national governance framework for coastal and marine management in Guyana. ToR were developed and approved and organizations to serve as members of the committee were identified and notified. A draft Guiding Framework for the Integrated Coastal and Marine Management (ICMM) was also prepared with a view to propose the direction for integrated governance of the coastal and marine environments.

The first meeting of the committee will be held in 2019, where it is expected that the work-programme of the committee will be implemented.

Sub Regional Project on the North Brazil Shelf Large Marine Ecosystem (NBSLME).

The pilot project being implemented by the EPA will facilitate the development and testing various governance arrangements to enable effective ecosystem based management (EBM) of mangroves and wetlands. The scope of the project will see the involvement of five countries, notably Brazil, French Guiana, Suriname, Guyana and Trinidad and Tobago. The Small Scale Funding Agreement was signed and the budget and work-plan were approved.

In 2019, the project will implement at least one
(1) mangrove
restoration/rehabilitation/protection and
pollution abatement/prevention project in each
of four (4) countries of the NBSLME.



a year's overview

BIOLOGICAL RESOURCES MANAGEMENT



The GIBIF Project

The main deliverables under this project during 2018 were;

- Assessment of National Biodiversity Research Information System (NBRIS) and Database Design”. This resulted in the development of a local platform/database which is currently being tested for functionality.
- Assessment of “Users and Holders of Biodiversity Data” which allowed for the preparation of an inventory of biodiversity data in the country.
- Register Guyana as a contributor to GBIF.

ENVIRONMENTAL COMMUNICATION EDUCATION & AWARENESS

Earth Hour

The Environmental Communication, Education and Awareness programme is cross-cutting across the Agency's programme areas. This is integral to environmental protection since it is an essential tool for raising awareness and influencing positive attitudes towards conservation and resource management.

In 2018, forty-nine (49) outreaches were conducted in fulfilling the Agency's mandate, taking a variety of format. Twenty-eight (28) of these were coordinated as a part of celebrating environmental observances. Some of the major programmes/activities in 2018 were:

Environmental Observance

World Water Day

- Two (2) outreaches were executed in observance under the theme 'Nature for water' and emphasized on nature based solutions for issues relating to water quality. These sessions targeted farmers from Supenaam and representatives from Neighbourhood Democratic Council (NDCs) within the Essequibo Islands West Demerara Constituency.

- Apart from coordinating and executing the Connect2Nature Selfie Competition, the EPA made presentations at the Earth Hour concert held on March 24, 2018 and the National Park.

Earth Day

- Earth Day was celebrated under the theme 'End Plastic Pollution'. On April 23, 2018, the EPA partnered with the Department of Environment to hold a ceremony and exhibition at the Baridi Benab. The feature address by Minister of State, Ministry of Presidency, Hon. Joseph Harmon. Other Speakers included Ms. Ndibi Schwiers Director, Department of Environment, Minister of Business, Hon. Dominic Gaskin.
- The other events were a Single-use Plastic Free Day which involved major supermarkets around Georgetown and the 'Trash to Fashion' Show which engaged schools with Environmental Clubs, having them create stylish outfits with upcycled materials. All of these activities served to reduce the use of single-use plastic.



a year's overview

ENVIRONMENTAL COMMUNICATION EDUCATION & AWARENESS

International Day for Biological Diversity

- The Agency participated collaborated with Guyana Youth and Environment Network (GYEN) and the Department of Environment for a Biodiversity night and ceremony, respectively.

World Environmental Day

- The Agency celebrated this day by initiating the conversations on single-use plastics in Regions 2, 6, 7 and 10.

World Oceans Day

- The EPA participated in the Sol Guyana beach Clean-Up on June 9, 2018 at the Kingston Seawall in commemoration of World Ocean Day.

World Ozone Day

- Five (5) outreach sessions were executed in collaboration with the Ozone Unit of the Hydro-Meteorological Service of Guyana.
- Three (3) sessions were conducted with Grade 6 pupils from fifteen (15) schools in Region 6 while two (2) sessions engaged CPCE teachers from New Amsterdam and Turkeyen.

International Coastal Clean-Up

- The Agency partnered with the Caribbean Youth Environment Network (CYEN) to execute fourteen (14) outreach sessions. The cleanup exercises were conducted at Kingston Seawall and at No.63 Beach which saw the participation of approximately 300 volunteers.

Scoping Meetings



EEPGL EIA DISCLOSURE MEETINGS

During the period of July 09-20, 2018, eight (8) sector and public disclosure meetings, respectively, were held to brief participants on the findings of the EEPGL Liza Phase 2 EIA Study. These meetings were strategically conducted at Regions 1,2,3,4,5 and 6.

Toolsie Persaud Timber Traders

On September 26, 2018, a sector disclosure meeting was held at the EPA Boardroom to present the findings of the Toolsie Persaud Timber Traders Inc. project. This meeting saw the participation of eleven (11) agencies.

RL SOOKRAM AND SONS

A sector scoping meeting on September 27, 2018, at the EPA Boardroom to present the project and record all questions and comments communicated by participants.

EAST BANK-EAST COAST ROAD LINKAGE

A sector scoping meeting on December 17, 2018, a sector was held at the Critchlow Labour College. The purpose of this meeting was to present a summary of the East Bank-East Coast Road Linkage Project to sectors giving them an opportunity to communicate their concerns and make inquiries.



ROMANEX GUYANA EXPLORATION-GOLD MINING

EPA conducted a public disclosure meeting on September 11, 2018, at the Aishalton Multipurpose Center. Over 90 persons living in Aishalton and surrounding communities participated in the meeting.



OTHER OUTREACHES INCLUDE;

- Facilitation of school tours
- Launch of "Connection Youth Group" at Mackenzie High School, Linden
- Awareness talks
- Sensitization session with Eccles Industrial site businesses
- Peace day outreach
- Recycling workshops
- Participation in Demerara Mutual Life "Go green" Launch

EXHIBITIONS

- Career Fair
- Ministry of Education (S.T.E.A.M Fair)
- Guyana Timber Expo
- Health Expo

a year's overview

ADMINISTRATIVE

Procurement and Asset Management

Physical checks of fixed assets were conducted by the Audit Office of Guyana. These were checked against the Agency's purchased and financial records.

For the fiscal year of 2018, the Agency was not granted approval for capital purchases from government's subvention. However, capital items which includes; (2) new vehicles (Fortuner and Hilux Pick Up), printer, office chairs and desks, cubicle partitions etc. were approved by the Agency's Board of Directors.

Approval were sought from the Ministerial Tender Board- Ministry of the Presidency for the purchase of all capital expenditure below \$1,500,000.00 GYD. Payments and purchases for the items listed above were sent to the Ministry of Finance through the Ministry of the Presidency.

Further, the Agency sought approval and was granted same from Cabinet, for the purchase of the (2) new vehicles highlighted above.

Structural works for both the (3) three storey main Office and regional office in Whim, Region 6 have been completed. The Lethem Region 9 project was terminated and the Agency is currently in the process of seeking full reimbursement of monies spent.

Network infrastructure works has started on the new building is estimated to be at 60% completed.

Vehicle Maintenance

Regular maintenance of the Agency's fleet of vehicles through general servicing has been an objective of the Unit in order to avoid extensive repairs and subsequent substantial cost to the Agency.

All necessary renewals of legal documents (insurance, fitness, road license) were also arranged by the Unit.

a year's overview

ADMINISTRATIVE

Procurement and Asset Management

The Agency's fleet consists of a number of aged vehicles which were regularly maintained through servicing. The Agency also incurred additional costs of maintaining its vehicles while on a limited budget.

Building and Compound Maintenance

The Unit continues to enhance the general aesthetics of the building and compound through regular cleaning, brushing and maintenance. Contracts were prepared and signed for the following works and services:

- Termite control;
- Disposal of sanitary units;
- Hand sanitizer;
- Air fresheners;
- Maintenance of the photocopier/Printers;
- Electrical repairs;
- Security Services (New Service- Radar);
- Service and repairs to air conditioning units; and
- General Cleaning of the Compound and its environs.

a year's overview

MANAGEMENT INFORMATION SYSTEM(MIS)

Information Systems and Website Maintenance

- The Agency's website was upgraded to Joomla 3.8 and continues to be updated with relevant news and downloads.
- A Proposal for the implementation of an intelligent Environmental Decision Support System was developed. This system will be integrating mobile data collection and GIS to achieve informed planning and improved decision making.
- Network Support and Administration
- Installation of CAT6 Voice and Data Communication network for the Agency's new main building has commenced. This activity should be completed by the end of February 2019.
- The Agency received two Fortinet Firewall hardware devices to enhance network security and to protect us against cyber security threats.

The Agency's received another drone (DJI Mavic Pro) to add to its fleet. These Drones are expected to be used more frequently in field visits in 2019, which will also be linked to our GIS systems to provide spatial analysis.

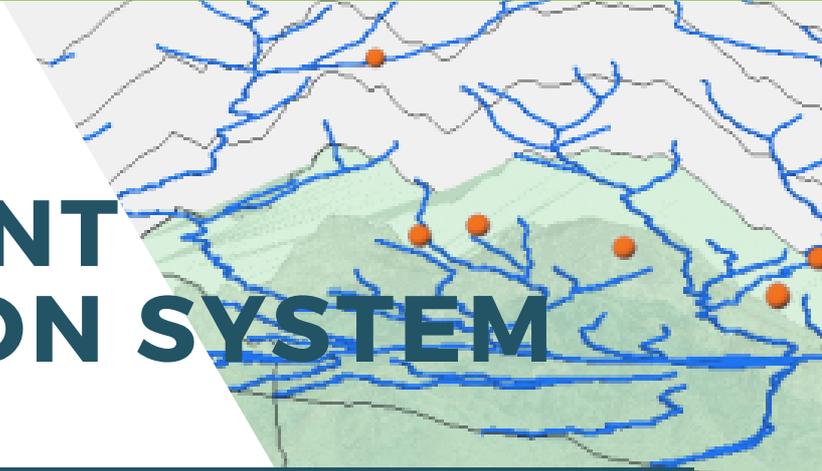
GIS Unit

The Geographic Information Systems Unit has responsibility for the efficient management of all spatial related data in the EPA and for the empowerment of all employees within the Agency with the necessary skills to enable the use of GIS data as a tool for sound decision-making.

In 2018, the Unit was merged with the IT Unit and was known as the Management Information Systems Programme Area.

a year's overview

MANAGEMENT INFORMATION SYSTEM



GIS Unit cont'd

Prepared maps for the Agency on the following:

- Agricultural areas in Guyana with Land Use/Land Cover overlays;
- Location of forestry operations in Region 2, 6, 7, 10;
- Projects which produce emissions in Region 4 and Georgetown;
- Prepared map showing permitted operations in Guyana 2016-present;
- Abary, Mahaica and Mahaicony Rivers, Pomeroon, Essequibo and Canje Rivers and Ireng Rivers;
- Complaint inspections conducted by the Agency for Autobody Workshops, Gold Smelting and Gold Mining Projects;
- Community Forestry Organisations (CFOs) in Guyana - EU-FLECT Project.
- Proposed landfill sites in Guyana;
- Radioactive sources and radiating devices locations;
- Projects with expired permits 2011-2018;
- Permitted and expired poultry and swine operations for 2018.

HUMAN RESOURCES MANAGEMENT

The Human Resources Unit, under the supervision of the Administrative Director, is responsible for recruitment of skilled and competent workers to conduct the work of the Agency. The Unit works towards building a team of professionals who are empowered by knowledge and skills to perform competently and with excellence.

STAFFING

At the end of 2018 there were 97 staff members on the Agency's Staff Establishment, 95 full time employees and two (2) seconded staff.

Vacancies & Appointments in 2018

See Appendix 2.

Confirmations

During the year under review confirmations by Units/Programme Areas are as follows:

Technical Secretary - 1

The following officer from the EPA was seconded to the Department of the Environment:

1. Ms. Aretha Forde, and
2. Ms. Diana Fernandes.

Promotions

One (1) Officer was promoted from the position of Environmental Officer I to Environmental Officer II and another was promoted from environmental Officer II the position of a Senior Environmental Officer after satisfactorily performance.

ORGANISATIONAL STRUCTURE

Fig. 1 below shows the Organisational Structure of EPA during 2018 which sought to solidify the new approach that commenced during 2017 the restructuring. The Agency's mandate is implemented primarily through five (5) of its major Programmes: Biodiversity Management (BM); Environmental Management (EM); Cross-Sectorial; Education and Awareness; and Capacity Building. The EM Programme now comprises the following Programmatic Areas:

- **Technical Secretariat (TS)** – screens and manages the Authorisation process, as well as, fulfilling obligations under the Global Environmental Facility (GEF) and the Multilateral Environmental Agreements (MEAs) to which the Agency is the Focal Point.
 - **Compliance and Enforcement (C&E)** – ensures projects' compliance with permit conditions and manages the complaints response process.
 - **Ecological and Human Health Risk (EHHR)** – manages risks to ecosystems and human health and safety by identifying, assessing, monitoring and managing the adverse effects of contaminants and effluents on the health of ecosystems and human health in accordance with the Environmental Protection Act.
 - **Land Resources Management (LRM)** – develop standards that seek to restore and reclaim mind out and other degraded lands, prevent release to land and to conserve and manage land based resources.
 - **Biological Resources Management (BRM)** – protection and conservation of Biological Resource; and promotes sustainable development in Guyana.
-

ORGANISATIONAL STRUCTURE

Programme Areas cont'd

- **Water Quality Management (WQM)** – manages water pollution by developing and enforcing permit conditions in keeping with the Environmental Protection (Water Quality) Regulations, 2000. Defines the types and amounts of contaminants that fresh and coastal waters can experience without compromising value.
- **Waste Management (WM)** – develops guidelines and standards for the disposal of waste into the environment to manage pollution.
- **Environmental Analytical Services (EAS)** – oversees the development and operation of EPA's first independent Environmental Analytical Laboratory. Provides science-based evidence in support of the Agency's decision-making process.
- **Air Quality and Noise Management (AQNM)**- promotes a successful air quality regime through the development of standards, permitting facilities, monitoring and enforcement of the requisite legislation.
- **Research and Development (RD)** – provides sound scientific basis to inform decision making on the state of the environment.
- **Legal Services (LS)** – ensures compliance with the Environmental Protection Act and Environmental Protection Regulations.
- **Environmental Communication, Education and Awareness Programme (ECEAP)** - raises awareness about environmental issues and the work of the Agency to ensure public participation in environmental decision making.
- **Management Information Systems (MIS)** – assists in environmental management by providing technical support to manage information systems.

ORGANISATIONAL STRUCTURE

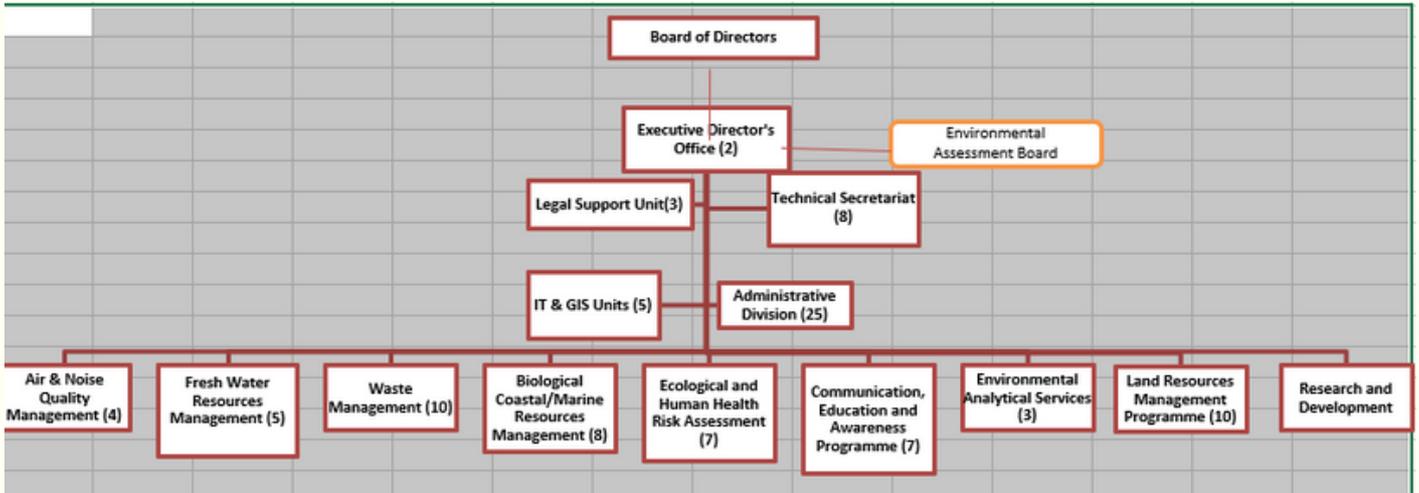


Fig 1: Organisational Chart

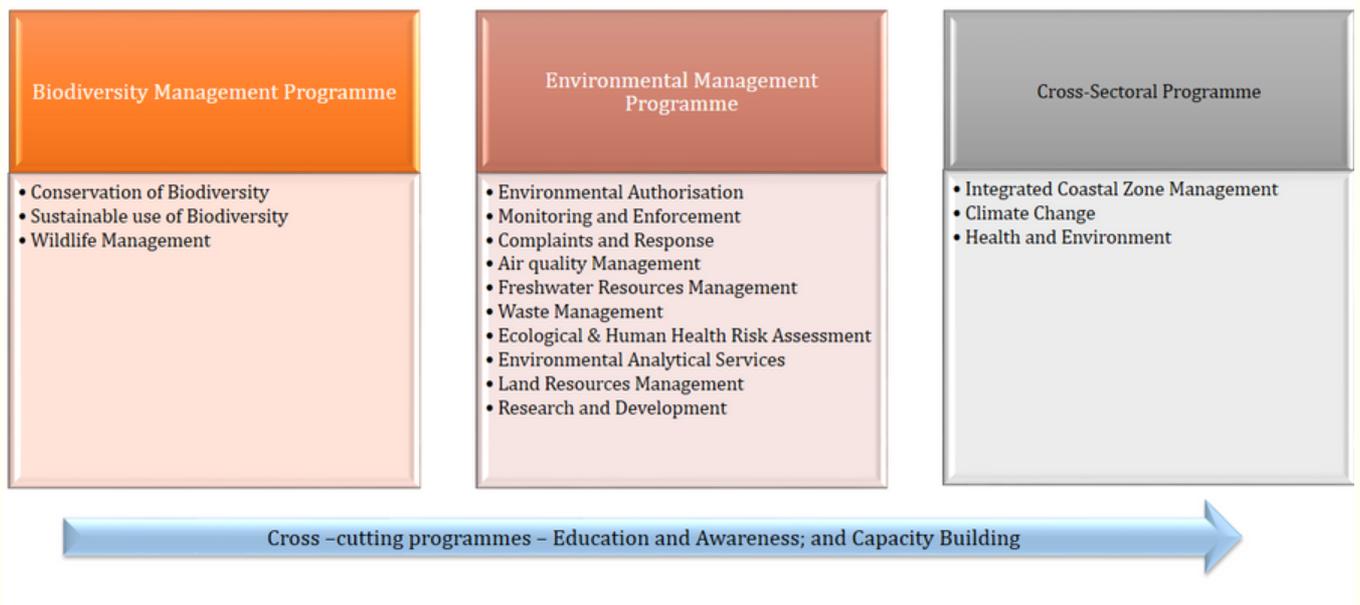


Fig. 2: EPA's Programmes

	NAME OF OFFICER	DESIGNATION
1.	<u>Dr. Vincent Adams</u>	Executive Director
2.	<u>Kemraj Parsram</u>	Director
3.	<u>Mr. Ravi Saesnarine</u>	Driver to ED
4.	<u>Dhanraj Persaud</u>	Administrative Director (AD)
5.	<u>Faneeza Alli</u>	Executive Assistant to AD
6.	<u>Ryan Tiwari</u>	IT Specialist
7.	<u>Antonio Valenzeola</u>	Network Administrator
8.	<u>Barrat Sasenarine</u>	Technical Support Officer
9.	<u>Radhika Ramphal</u>	Human Resources Assistant
10.	<u>Surendra Boodhoo</u>	Finance Officer
11.	<u>Tarmattie Lall</u>	Senior Accounts Clerk
12.	<u>Colita Mohamed</u>	Senior Accounts Clerk
13.	<u>Charlotte Elliot</u>	Senior Accounts Clerk
14.	<u>Dadre Bayley</u>	Accounts Clerk
15.	<u>Vanshanie Ramlall</u>	Accounts Clerk
16.	<u>Joshua Muridall</u>	Administrative Officer
17.	<u>Niketa Chintaman</u>	Administrative Assistant
18.	<u>Eric Hinds</u>	Driver
19.	<u>Shem Sham</u>	Driver
20.	<u>Kevin Jones</u>	Driver
21.	<u>Winifred Perreira</u>	Cleaner
22.	<u>Kevin Durant</u>	Handyman
23.	<u>Aminah McPherson - Damon</u>	Legal Officer
24.	<u>Lauren Sampson</u>	Legal Assistant
25.	<u>Urmila Singh</u>	Executive Assistant
26.	<u>Ruth Trotman</u>	Filing Clerk
27.	<u>Sonia Gumbs-Luke</u>	Senior Environmental Officer
28.	<u>Karen Alleyne</u>	Senior Environmental Officer

29.	Camille Adams	Senior Environmental Officer
30.	Ronn Sullivan	Senior Environmental Officer
31.	Savitri Itwaru	Environmental Officer II
32.	Dulcie Abrahams	Environmental Officer II
33.	Gregoria Vaughn	Environmental Officer II
34.	Junior Toney	Environmental Officer II
35.	Khadija Ali	Environmental Officer II
36.	Malicia Hall	Environmental Officer II
37.	Saudia Sadloo	Environmental Officer II
38.	Delon Earle	Environmental Officer II
39.	Kathia David	Environmental Officer
40.	Rhea Khanai	Environmental Officer (seconded)
41.	Colis Primo	Senior Environmental Officer
42.	Tashana Redmond	Senior Environmental Officer
43.	Felicia Adams	Senior Environmental Officer
44.	Odessa Duncan	Senior Environmental Officer
45.	Ladonna Kissoon	Environmental Officer II
46.	Dwayne Bancroft	Environmental Officer II
47.	Browne Denroy	Environmental Officer II
48.	Gwenetta Fordyce	Environmental Officer 11
49.	Darshani Seeram	GIS Environmental Officer II
50.	Nadia Nasir	GIS Technician
51.	Joel Gravesande	Engineer
50.	Surinaul Singh	Field & Data Management Tec.
52.	Faneeza Alli	Executive Assistant
53.	Elysha Patterson	Administrative Assistant
54.	Sharifah Razack	Director
55.	Fareena Alli	Executive Assistant
56.	Candacie Thompson	Senior Environmental Officer
57.	Whoopi Liverpool	Environmental Officer II
58.	Dillon Charles	Environmental Officer
59.	Karen Small	SEO, Wildlife Unit
60.	Stacy Lord	SEO, Biodiversity Unit
61.	Vidyanand Mohabir	Environmental Officer II
62.	Diana Fernandes	Environmental Officer II
63.	Rayner McAndrew	Environmental Officer II
64.	Alisha Rambarran	Executive Assistant
65.	Jasmine Adams	Litter Prevention Warden
66.	Prudence Archer	Litter Prevention Warden

67.	<u>Shonella Charles</u>	Litter Prevention Warden
68.	Joycelyn Gibbons	Litter Prevention Warden
69.	Carl Foo	Litter Prevention Warden
70.	Carla Payne-Thomas	Litter Prevention Warden
71.	<u>Eshwar Samaroo</u>	Litter Prevention Warden
72.	<u>Avinash Persaud</u>	Litter Prevention Warden
73.	<u>Tethram Persaud</u>	Litter Prevention Warden
74.	<u>Imole McDonald</u>	Technical Officer (seconded)
75.	Anjanette Naughton	Cleaner (Temp)
76.	<u>Osan Johnson</u>	Office Assistant (Temp)
77.	Leon Singh	Office Assistant (Temp)
78.	<u>Radesh Tulsidas</u>	Driver
79.	<u>Rajendra Sookedo</u>	Administrative Assistant/ Vehicle Maintenance
80.	<u>Nirvanie Singh</u>	Accounts Clerk
81.	<u>Asaudia Rahim</u>	Field & Data Management Technician
82.	Kimberly Valenzuela	Field & Data Management Technician
83.	<u>Saliga Zaman</u>	Environmental Officer 1
84.	<u>Avanelle Jackson</u>	Environmental Officer 1
85.	Tricia Noble	Environmental Officer 1
86.	Michael Harding	Environmental Officer 1
87.	Jennifer Luke	Environmental Officer 1
88.	Tiffany Thornhill	Environmental Officer 1
89.	Miranda Welch	Environmental Officer 1
90.	<u>Shebiki Jeffrey</u>	Environmental Officer 1
91.	<u>Romario Hastings</u>	Environmental Officer 1
92.	<u>Omanda Ramsarup</u>	Environmental Officer 11
93.	<u>Karishma Misir</u>	Environmental Officer 11
94.	<u>Christine Samwaroo</u>	Senior Environmental Officer
95.	<u>Shaun Lall</u>	Senior Environmental Officer
96.	Michel Swanston- Nurse	Senior Environmental Officer
97.	<u>Sasenarine Tomby</u>	Senior Environmental Officer

NO.	NAME	POSITION	DATE OF APPOINTMENT
1.	<u>Radesh Tulsidas</u>	Driver	May 21,2018
2.	<u>Rajendra Sookedo</u>	Administrative Assistant/ Vehicle Maintenance	May 02,2018
3.	<u>Nirvanje Singh</u>	Accounts Clerk	March 26,2018
4.	<u>Asaudia Rahim</u>	Field & Data Management Technician	March 03,2018
5.	Kimberly Valenzuela	Field & Data Management Technician	March 03,2018
6.	<u>Saliqa Zaman</u>	Environmental Officer 1	June 04,2018
7.	<u>Avanelle Jackson</u>	Environmental Officer 1	June 04,2018
8.	Tricia Noble	Environmental Officer 1	June 04,2018
9.	Michael Harding	Environmental Officer 1	June 04,2018
10.	Jennifer Luke	Environmental Officer 1	April 03,2018
11.	Tiffany Thornhill	Environmental Officer 1	June 04,2018
12.	Miranda Welch	Environmental Officer 1	June 04,2018
13.	<u>Shebiki Jeffrey</u>	Environmental Officer 1	June 04,2018
14.	<u>Romario Hastings</u>	Environmental Officer 1	June 04,2018
15.	<u>Omanda Ramsarun</u>	Environmental Officer 1	June 04,2018
16.	<u>Karishma Misir</u>	Environmental Officer 11	June 04,2018
17.	<u>Christine Samwaroo</u>	Senior Environmental Officer	August 27,2018
18.	<u>Shaun Lall</u>	Senior Environmental Officer	June 04,2018
19.	Michel Swanston- Nurse	Senior Environmental Officer	June 04,2018
20.	<u>Sasenarine Tomby</u>	Senior Environmental Officer	November 05,2018
21.	Dr. Vincent Adams	Executive Director	October 01,2018

Name of Training/Workshop/Meeting	Date	No. of EPA Staff Participating
National Hydrographic Coordinating Committee” in effort to ensure that all Guyana’s rivers and navigable water are properly surveyed and charted,	January 22, 2018	1
Customs Workshop – National Ozone Action Unit, HCFC Phase-Out Management Plan.	February 26- March 01, 2018	1
A Demonstration of Hydrocarbon Encapsulation Technology Workshop	February 06. 2018	3
Gender Integration Workshop in the Natural Resources Sector.	February 09, 2018	2
International Maritime meeting for Organizations Audit	February 12, 2018	1
Stakeholders Forum on the Development of National Trust’s Five Year Strategic Plan (2019	February 15, 2018	1
Virtual preparatory sessions for the <u>Codex Alimentarius</u> Committee meeting.	February 15, 2018	4
Meeting for International Standards Development process in the International Organization for Standardization (ISO).	February 27, 2018	1
Workshop for Engagement with Key Stakeholders on the Publication of Codes of Practice under the Environmental Regulation for Mining.	February 27, 2018	3
Hosting of meeting to exchange experiences and ideas regarding Gold Mining and the Environment in Guyana	February 27, 2018	2
Workshop on Scaling Up Renewable Energy in Guyana.	March 6, 2018	1
EIMMS Specialist demonstrated and discussed their third deliverable on the draft Environmental Information Management and Monitoring System and website to the Technical Working Group.	March 06, 2018	3
Public Consultation Session The consultation was held to discuss the “Code of Practice for the designs and	March 14, 2018	4

construction of septic tanks and associated secondary treatment and disposal systems.		
Workshop on Radiation Legislation Safety in Guyana.	March 16, 2018	2
A meeting of Programme Monitoring Committee for Donor Funded Project under The Agriculture Sector Development Unit on March 12, 2018 at Ministry	March 12, 2018	1
Name of Training/Workshop/Meeting	Date	No. of EPA Staff Participating
XXIV Inter-America Congress Of Ministers and High- Level Authorities Of Tourism under the Theme: Connecting the Americas Through Sustainable Tourism.	March 21, 2018	1
Youth Panel Discussion in observance of Earth Hour 2018.	March 14, 2018	2
workshop on Aligning the Sustainable Development Goal in the Green State Development Strategy (GSDS) Multidimensional Approaches for the 2030 Sustainable Development Agenda.	March 15 – March 16, 2018	1
An Outreach session with Neighborhood Democratic Council of Region No. 4. This session was to create a stronger interagency relationship with all local authorities	March 28, 2018	2
The second outreach session with the Local Democratic Organs	March 28, 2018	1
Inter-Agency Compliance Collaboration Forum	April 11, 2018	2
Geospatial Information System <u>Trainin</u>	April 9-10, 2018	1
IHR Committee Meeting	April 10,2018	1
Webinar: “Food Safety Modernization Act (FSMA) Foreign Supplier Verification Programme (FSVP) Regulation Requirements.” The webinar was held on April 17, 2018 at the Inter-American Institute for Cooperation on Agriculture.	April 17, 2018	1

Strengthening technical capacities to mainstream and monitor Rio Convention implementation through policy coordination.” As a component of the project’s activities a training session for Media and Communications Professionals	April 11, 2018	1
Commissioning of the Drainage Pump Station Meeting	April 20,2018	1
Oil Spill Response and Accident command Systems Training	April 23- April 25, 2018	2
Oil Spill Response Training	April 26, 2018	4
Strengthening Technical Capacity to Mainstream and Monitor Rio Conventions Implementation through Policy Coordination,” which was organized by the Department of	April 25, 2018	1
Strengthening technical capacities to mainstream and monitor Rio Convention implementation through policy coordination.” As a component of the project’s activities a <u>MEA Workshop</u>	April 27, 2018	1
Integrated Solid Waste Management Training Workshop on Public Awareness and Education.	May 15 - 16, 2018	6
Virtual Technical Forum: “ <u>Biobeds</u> in Agriculture – A Good Practice for Health and Environmental Protection”	May 03, 2018	1
<u>Exxonmobil’s</u> Regional Response Training and Tabletop Exercise	May 02 - 04 2018	2
Virtual Technical Forum: “Importance of Assessing the Impact of Disaster on the Livestock Sector and Presentation of a Course on Good Emergency Response Practices” on May 22	May 22, 2018	1
Outreach Session with Neighborhood Democratic Council of Region 3	May 22, 2018	1
Risk Assessment Workshop	June 06,2018	1
A session on Gender Integration in the Natural Resources Sector	June 07,2018	1
Stakeholder consultation on the Health, Safety and Environmental (HSE) Requirement for the Energy Sector.	June 13, 2018	1

Customs Workshop – National Ozone Action Unit, HCFC Phase-Out Management Plan.	June 19-22, 2018	2
International Workshop on City Planning and Sustainable Resource Management in Guyana: Community and Industrial Engagement	June 28,2018	1
Qualitative Research Methods short course programme, this course intended to support capacity building within major natural resource management institutions.	July 02-13,2018	1
First Workshop theme “Towards a National Geospatial Framework and Policy in Guyana”	July 03-05 2018	1
EEPGL Public Meeting on the Presentation of the Liza Phase 2 Development Project EIA Study in region #4	July 09,2018	12
EEPGL Public Meeting on the Presentation of the Liza Phase 2 Development Project EIA Study in region #3	July 10,2018	8
EEPGL Public Meeting on the Presentation of the Liza Phase 2 Development Project EIA Study in region #2	July 12-13,2018	5
Capacity Building Extractive Industries Transparency Initiative (EITI) Workshop.	July 9-10, 2018	2
Team Building and Project Planning Workshop for the ‘Enhancing the National Quality Infrastructure for Economic Diversification and Trade Promotion Project GY-L-1059’.	July 12-13,2018	1

International Standard ISO/IEC 17020:2012 Conformity Assessment Training Workshop.	July 23-27,2018	1
EEPGL Public Meeting on the Presentation of the Liza Phase 2 Development Project EIA Study in region #5	July 16-17 2018	5
EEPGL Public Meeting on the Presentation of the Liza Phase 2 Development Project EIA Study in region #1	July 19-21 2018	6
Final Presentation on the Development of a Grievance and Redress Mechanism for REDD + Implementation in Guyana	July 25, 2018	1
Debriefing Meeting with United Arab Emirates-Caribbean Renewable Fund (UAE-CREF) Team, which the Guyana Energy Agency in keeping with its mandate has been advancing the proposed rehabilitation of a 700 KW <u>Moco Moco</u> Hydropower site in Region # 9.	August 07, 2018	1
Caribbean Energy Statistics Capacity Enhancement Project: Workshop on Human Recourses Management, Energy statistic & Planning Awareness.	August 14, 2018	1
Name of Training/Workshop/Meeting	Date	No. of EPA Staff Participating
Alignment Workshop which aims to bring together the national and international experiences which will align the project to meet national need/targets and international Trends/ requirements.	September 04-06,2018	2
CORSNET (CORS network) Workshop.	September 06, 2018	2
National Training session Webinar on use of the online Codex Commenting system.	September 11, 2018	1

<p>Training Workshop on ISO/IEC Standards Sampling and Inspection Techniques aimed at improving the capacity of the staff from inspections agencies.</p>	<p>September 17-21, 2018</p>	<p>1</p>
<p>Discussion Workshop on the Draft Debarment Regulations and to discuss concerns and possible improvements to the proposed regulations. This workshop was planned by the Public Procurement Commission</p>	<p>October 15, 2018</p>	<p>2</p>
<p>Meeting; National Spatial data Infrastructure Consultants Visit to Guyana as a part of the Implementation of the Sustainable Land Development and Management Project.</p>	<p>October 27, 2018</p>	<p>1</p>
<p><u>EXXonMobile</u> 4th training working on Integrated Solid Waste Management.</p>	<p>October 24-30, 2018</p>	<p>4</p>
<p>12th Biennial Conference of the Commonwealth for Public Administration and Management (CAPAM). This Conference expects to attract International, Regional and National Public Officials and the theme is transforming the Public sector for Climate Governance. Public servants will benefit from new management skills and knowledge, which will complement Guyana Green state development strategy (GSDS).</p>	<p>October 22-24 2018</p>	<p>2</p>
<p>Validation Workshop on Green Business Framework. This workshop seeks to develop a policy and regulatory framework a ‘Green Business Framework’ to incentivize and steer business activity to maintain environmental sustainability while achieving diverse investment and growth.</p>	<p>October 23-25, 2018</p>	<p>2</p>

<p>International Union for the Conservation Nature-commission (IUCN) Red Lists of Ecosystems in the <u>Guianas</u> Training Workshop.</p>	<p>October 24, 2018</p>	<p>1</p>
<p>The Audit Office of Guyana is currently conducting a Workshop- Building Capacity for Conducting Environmental Auditing on the Illegal Dumping of Waste, Mrs. Candacie Thompson, Mrs. Sonia <u>Gumbs-Luke</u> and Ms. Odessa Duncan present on a presentation on Litter and Enforcing at Grand Costal Hotel on Friday 02, 2018.</p>	<p>November 02,2018</p>	<p>2</p>
<p><u>the</u> Inter-American Development Bank second session of training and dialogue program for Hydrocarbons regulators in Latin America and the Caribbean.</p>	<p>November 12-14, 2018</p>	<p>1</p>
<p>Aviation Fuel handing and Quality Assurance Training.</p>	<p>November 13-15,18</p>	<p>1</p>

Meeting Name	Location	Date	No. of Staff Participating
Workshop on Marine Genetic Resources and Regional Ocean Management to be held on March 12-14, 2018 in Kingstown	Jamaica	March 12 – March 14, 2018	1
Biosafety Fellowship, International Centre for Genetic Engineering and Biotechnology workshop	Italy	April 19 - 27, 2018	1
Exploratory Mission to Colombia: Exchanging best practices in Disaster Risk Management and School Safety”	Colombia	May 21 – 24 , 2018	1
Second <u>Iwokrama</u> Science Committee Meeting” t	New York	June 7 -8, 2018	1
The workshop entitled “Sharing National Experiences in Access and Sharing Benefits of Biodiversity: “The Brazilian Case” was organized by the Department of Genetic Heritage of the Brazilian Ministry of Environment and the Brazilian Cooperation Agency – ABC	Barbados	June 15 -15, 2018	1
The Global Environmental Facility (GEF) Caribbean Constituency and the Sixth GEF Assembly Meetings	Vietnam	June 20-23, 2018	2
41 st session of the Codex <u>Alimentarius</u> Commission Meeting	Rome Italy	July 02-06, 2018	1
Fourth Meeting of the Scientific, Technical and advisory Committee (STAC) to the Protocol Concerning Pollution from Land-Based Sources and Activities in the Wider Caribbean Region (LBS Protocol),	Panama City	July 18 -20, 2018	1
Meeting Name	Location	Date	No. of Staff Participating
“Global Environmental Facility (Gef 7) Project Development for Waste and Chemicals Management in the Caribbean region	Spain, Trinidad	July 16,2018	1
Interregional Open-Ended Meeting on the Code of the <u>Safety</u> and Security of Radioactive Sources.	Austria	August 13-25,2018	1
Training Program for Implementation of the Nagoya Protocol and ABS issues from 20 August 2018 to August 25, 2018 in St. Lucia.	St. Lucia	August 20-25,2018	2
Regional Training Course on Train the Trainers on Orphan Sources Search and Recovery.	Texas	August 27-31,2018	1
The VI Regional Policy Dialogue on Environmental <u>Licensing</u> and Enforcement in Latin America and the Caribbean (PPD)	Washington	September 10-14,2018	2
Workshop on Mutually Supportive Mechanisms for National Level Implementation of the International Treaty and the Nagoya Protocol.	Peru	September 25-282018	1
Regional Consultation on options for a Permanent Policy Coordination Mechanism (PPCM) and Sustainable Financing Plan (SFR) for Ocean Governance in the CLME+ Region	Colombia	September 25-26,2018	1

Technical Meeting: exchange Knowledge and Experiences on Surface Water Quality Monitoring Networks and Systems in Amazon Region and Induction to Hydrological Monitoring Techniques Through satellites.	Brazil	October 22-26,2018	1
Meeting Name	Location	Date	No. of Staff Participating
International Atomic Energy Agency (IAEA Coordination meeting and workshop on the use of nuclear techniques in the Marine Environmental for SIDS	Cuba	November 5-9, 2018	1
Latin America and Caribbean Regional Workshop on the Environmentally Sound Management of E-Waste and Forum on their <u>Transboundary</u> Movements from November 06 – 09 N	Argentina	November 6-9,2018	1
Regional Workshop on Project Design Based on the Logical Framework Approach and Best Practices	Jamaica	November 12-16, 2018	1
Second Meeting of the conference of the parties to the <u>Minamata</u> convention on Mercury (COP2).	Switzerland	November 19-23, 2018	1
Ad Hic Open-Ended Expert Group on Marine Litter and Micro plastics meeting.	Switzerland	December 3-7, 2018	1
United Nations Environment <u>Programme</u> (UN Environment) Cleaner and More Efficient Fuels and Vehicles.	Jamaica	December 05-06, 2018	1