Belize Chemicals and Waste Management Project

Terminal Evaluation Report

Submitted to UNDP Belize

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Acknowledgements

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Please note the analysis and recommendations of this report do not necessarily reflect the views of the United Nations Development Programme, its Executive Board or the United Nations Member States. This publication reflects the views of its author.

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Chemicals and Waste Management Project Terminal Evaluation Approach

A. TERMINAL EVALUATION PURPOSE, OBJECTIVES AND SCOPE

In line with the UNDP / GEF Evaluation Policy[1] the Terminal Evaluation is undertaken at completion of the project to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote operational improvement, learning and knowledge sharing through results and lessons learned among UNDP and GEF. Therefore, the evaluation will identify lessons of operational relevance for future project formulation and implementation [especially for future follow-on projects, if applicable].

B. PRINCIPLES FOR DESIGN AND EXECUTION OF THE EVALUATION

The methodology was used for the completion of the Terminal Evaluation of the Chemicals and Waste Management in Belize was compliant with the guidelines of the two governing documents used for UNDP / GEF projects:

- UNDP: "**Guidance for Conducting Terminal Evaluations of UNDP Supported GEF Projects"**
- UNEG "**Guidance in Integrating Human Rights and Gender Equality in Evaluations**"

These documents are reflected in the outline of the evaluation contained in the Terms of Reference and are consistent with previous midterm and final evaluations that I have carried out for UNDP and other international financing agencies. Certain aspects of these guidance documents would be discussed with UNDP / BDoE, based on conditions existent in Belize that may require minor modification to the guidelines as expressed in the two documents. No such modifications were identified during the completion of the Terminal Evaluation

The Evaluation Should be Participatory in Nature, without Obstructing the Implementation

- The stakeholders and public will feel a sense of 'buy in', and support the project success
- Participation in provision of comments/opinions/data will increase the chance of acceptance
- Participation provides a pathway for contribution of data from local inhabitants and authorities

The Evaluation Should be Well-Planned, with Clear Understanding by All Parties of the Goals, Outcomes, Outputs, and Review Schedule, Deliverables and Budgets

- A plan defines what who will be responsible for information, when due and what deliverables
- People can be held accountable to a plan, will well defined outputs and deliverables
- A plan creates the opportunity of matching capability to personnel, and identifying gaps

The Evaluation Should Have Full Stakeholder Buy-in to be Successful

- If all stakeholders buy in, then the project will get reasonable cooperation and support
- Barriers to success will be identified; ways of overcoming barriers will become apparent

Some key lessons learned from previous evaluations will be applied during the Evaluation:

- The priorities of the UNDP and relevant Ministries are essential
- It is essential that interviews be scheduled in advance of the mission, so that review time is effective
- The interviews / field visit locations will be designed / scheduled to obtain a full representative sample
- Courtesy meetings with officials should be limited and brief, in the interests of effectiveness
- Adaptive management will used during the Field Visits in the Pilot Areas based on conditions
- Field visits should encompass the variety of sites, and local and regional stakeholders
- Interviews with relevant policy and regulatory managers / implementers are essential to success
- At least a limited number of interviews should be held with gender representatives
- “Informal” interviews should be conducted with public individuals
- Concerns of interviewees regarding sustainability of the post-project activities will be recorded
- Financial performance of the project against budget will be reviewed

The combined use of the guidelines of the UNDP guidance documents, the above listed principles and the application of guidance gained from previous lessons learned provides the methodology that was used to successfully complete the Terminal Evaluation of the project.

There were no significant changes from the proposed methodology approach proposed in the TE inception report. As noted in the Inception Report, the specific questions asked to Stakeholders were modified to directly relate to their area of responsibility during the interview.

The approach to the Terminal Evaluation was based on the referenced documents, and the following principles:

- The preparation for the Evaluation was completed during the Inception phase and contained sufficient detail to be clearly understood by parties to the Evaluation
- An early acquisition and review of relevant documents was partially completed prior to the initiation of the Mission to Belize
- Assessment of the quality of the data provided, to the extent possible, was made during review
- Thorough planning of the Mission to Belize was completed, in order that key aspects were addressed, and inefficiencies were avoided
- Local and National conditions in Belize were identified and considered during the evaluation
- Recommendations were requested to be meaningful and implementable
- Full cognizance of Human Rights and Gender aspects were given appropriate importance and adequately reported
- Interviews during completion of the Evaluation were direct and sought unbiased opinions on issues

C. Evaluation Approach and Data Collection Methods

The evaluation approach is described in the preceding section, with data collected from several sources, including the following:

- Interviews with representatives of the key stakeholder entities that were appropriate for that stakeholder entity
- Review of project documents, as provided by the UNDP or the Department of Environment
- Review of Quarterly Reports, and End of Quarter
- Review of internet-based information on the status of POPs and hazardous chemicals; solid waste generation and handling in Belize; and generation of UPOPs and other particulate pollutants from sugar harvesting practices globally

Triangulation of information provided for the TE was accomplished through the following mechanisms, as they might relate to the specific information sought for the report:

- Review of the documents provided at the outset of the TE, during preparation of the Inception Report
- Review of written reports or notes provided during the evaluation mission to Belize

- Consideration of the answers to specific questions asked by the terminal reviewer of a Stakeholder representative interviewed
- Consideration of the answers to the same specific questions asked by the terminal reviewer of a second Stakeholder representative (same or different entity)
- Comparison of the above answers and necessary clarifications
- Visual observation of the “on the ground” physical objective achievement” during the field visits

Summarization of this data by the terminal evaluator allowed him to achieve the necessary triangulation

The results of the terminal evaluation are to be used by UNDP to guide future project design in solid waste and chemicals management, as a measure of the success of the programme design and funding in making effective use of the funding and staff resources of the UNDP; and by the implementing agency (Department of Environment) and the programme stakeholders in further adapting their entities capability and capacity to address waste and chemicals issues that may arise.
The evaluation rating scale that was used during the Terminal Evaluation was one that is contained in the GEF Guideline for the conduct of Terminal Evaluations and presented in Table 3

Table 3. Evaluation Ratings Scale

Ratings for Progress Towards Results: (one rating for each outcome and for the objective)		
6	Highly Satisfactory (HS)	The objective/outcome is expected to achieve or exceed all its end-of-project targets, without major shortcomings. The progress towards the objective/outcome can be presented as “good practice”.
5	Satisfactory (S)	The objective/outcome is expected to achieve most of its end-of-project targets, with only minor shortcomings.
4	Moderately Satisfactory (MS)	The objective/outcome is expected to achieve most of its end-of-project targets but with significant shortcomings.
3	Moderately Unsatisfactory (HU)	The objective/outcome is expected to achieve its end-of-project targets with major shortcomings.
2	Unsatisfactory (U)	The objective/outcome is expected not to achieve most of its end-of-project targets.
1	Highly Unsatisfactory (HU)	The objective/outcome has failed to achieve its project targets
Ratings for Project Implementation & Adaptive Management: (one overall rating)		

6	Highly Satisfactory (HS)	Implementation of all three components – management arrangements, work planning, finance and co-finance, project-level monitoring and evaluation systems, stakeholder engagement, reporting, and communications – has led to efficient and effective project implementation and adaptive management. The project can be presented as “good practice”.
5	Satisfactory (S)	Implementation of most of the three components has led to efficient and effective project implementation and adaptive management except for only few that are subject to remedial action.
4	Moderately Satisfactory (MS)	Implementation of some of the three components has led to efficient and effective project implementation and adaptive management, with some components requiring remedial action.
3	Moderately Unsatisfactory (MU)	Implementation of some of the three components has not led to efficient and effective project implementation and adaptive, with most components requiring remedial action.
2	Unsatisfactory (U)	Implementation of most of the three components has not led to efficient and effective project implementation and adaptive management.
1	Highly Unsatisfactory (HU)	Implementation of none of the three components has not led to efficient and effective project implementation and adaptive management.
Ratings for Sustainability: (one overall rating)		
4	Likely (L)	Negligible risks to sustainability, with key outcomes on track to be achieved by the project’s closure and expected to continue
3	Moderately Likely (ML)	Moderate risks, but expectations that at least some outcomes will be sustained due to the progress towards results on outcomes
2	Moderately Unlikely (MU)	Significant risk that key outcomes will not carry on after project closure, although some outputs and activities should carry on
1	Unlikely (U)	Severe risks that project outcomes as well as key outputs will not be sustained

D. Limitations to the Evaluation

The terminal evaluation was focused on interviews with the key project statkeholders, and limitations on the evaluation would necessarily include:

- The evaluation did not include interviews with organizations / public interest groups that could be affected by the legislation and policies that might impact their current views on chemicals and waste management. For example, those organizaitons might include:

- Enviornmental non-profit organizations, focused on clean up of shoreline, tourist waste disposal habits
- Industry groups wary of further regulation of their use of hazardous chemicals, disposal practices of solid waste and like aspects
- Other economic sectors, such as forestry, mining, and fisheries, where the legislation and policies might affect their current practices of exploitation
- Womens interest groups that might be able to contribute to the implementation of chemicals and waste management in a positive fashion

o The evaluation took place primarily in the north and central regions of Belize, and did not incude specific interviews of potential impacted groups in the Southern region, or the outlying islands / cayes

Project Overview

A. CHEMICALS AND WASTE MANAGEMENT PROJECT DEVELOPMENT CONTEXT

The Belize Chemicals and Waste Management project developed as a result of a confluence of factors identified by the government of Belize, programmatic sectors of importance to the UNDP in meeting its global objectives and driving forces from the principal sectors of the Belize economy. These factors included:

Government of Belize:

- Acceptance and signing of the Stockholm, Basel and Rotterdam Conventions, and the resultant requirements of those agreements on environmental treatments of solid and liquid wastes, agricultural and industrial chemicals, and POPs

UNDP

- UNDP's commitment globally to assist, as far as possible within their mandate, member countries to put in place environmental management, public health and safety programs, and livelihood improvement measure

Principal Economic Sectors of Belize

- Agricultural, Fisheries, and Tourism: The agricultural sector, principally sugar and citrus, recognized that it needed to move to more efficient and "green" farming methods, to compete internationally with its products. The fisheries sector recognized that in order to compete globally, it needed to reduce marine pollution, and improve shrimp and tilapia farming methods. The tourism sector, recognizing the natural resources and beauty of Belize, knew that to maintain and grow the sector, it had to promote and implement a "safe and clean" onshore, nearshore and shoreline environment

It was recognized that several environmental areas, identified in Horizon 2030, needed immediate attention. These were solid waste management, destruction of POPs and other hazardous chemicals, chemicals management, and the development of improved farming methods to reduce the use of agricultural fertilizers, pesticides and herbicides. Additionally, the agricultural and solid waste sectors were recognized as generating hazardous UPOPs, through the burning of agricultural production wastes and solid wastes in uncontrolled waste dumps.

The factors led to, in 2012 / 2013, the development of the Belize Solid Waste and Chemicals Management Project Document, designed to address within a 3 to 4 year period, the environmental issues noted previously. The project, developed under a UNDP / GEF funding, and then implemented under the auspices of the Belize Department of Environment, was initiated in 2014, and continued until late 2018.

The project's primary objective was to protect human health and the environment locally and globally through reducing releases of harmful POPs substances and increasing the Belizean capacity for hazardous chemicals and waste management. The desired Outputs of the project were:

1. Strengthened capacity in institutional policies and regulatory frameworks to affect the sound management of the chemical life cycle
2. Management and disposal of existing identified POPs from the country of Belize
3. Measurable reduction in dioxins release from informal and formal waste dumps (primarily by eliminating burning of uncontrolled waste)
4. Reduction of Unintentional POPs from open burning of agricultural and other crop wastes
5. Provision of learning and future project guidance through Monitoring and Evaluation of the project activities

In the course of achieving this outputs, physical and program measures included:

a. Closure of up to five (5) uncontrolled waste dumps throughout Belize
b. Construction of up to six (6) solid waste transfer stations
c. Construction of a central landfill (with a hazardous waste cell added later)
d. Promotion and piloting of mechanical harvesting of sugar cane, with no burning of crop harvesting wastes

In implementing the project, a Stakeholder Advisory Board was formed, with representatives of the principal governmental entities, industry and agriculture, UNDP, and research and university entities.

Principle geographic focus was nationwide, for the solid waste component; and in the Northeastern agricultural sector, the site of most of the sugar cane faming in Belize.

At the time of initiation of the project, the Government of Belize recognized that the future

economic success of the country would be dependent of several major sectors, these being:

- Agriculture (primarily sugar cane and similar crop production)
- Marine Resource utilization (fisheries, lobster, shrimp farming)
- Tourism

In parallel with the improvement of these sectors, and the development of local business and industries supporting them, it was recognized they depended on maintaining / improving the natural resource base on which the primary sectors depend, while maintaining / improving the livelihoods, environmental and health conditions of the general population.

B. Project Start and Duration :

The project was initiated in 2014 and continued to late 2018. The 2018 extension was to allow completing of several of the key activities dealing with the agricultural sector. The ProDoc States that the project was to be started in January 2014. Further information provided in Belize indicates that the project was approved on 22 July of 2014 and initiated in September 2014. A summary of project co-financing by project years indicates that in 2015, GEF had committed $ 586,495. Thus, the project must have been approved by the GEF in 2014. The copy of the ProDoc obtained from the Belize UNDP internet connection does not contain the date and signatures of the UNDP Resident Representative or the Minister of Forestry, Fisheries & Sustainable Development. Information provided by UNDP Belize indicated that the project was initiated in September 2014. The terminal evaluator does not know specifically on what dates the project team (Project Manager and Project Assistant) were placed on contract. It would be logical to assume that project logistics would be initiated during the period September – December 2014.

C. Problems the Chemicals and Waste Management Project Seeks to Address

Review of the environmental / legislative / developmental status of the country in 2012, indicated that the following overall issues should be addressed, with several of them being the focus of the Belize Chemicals and Waste Management Project:

Immediate and Development Objectives of the Project

Immediate Objectives

1. The need for review and strengthening of existing institutional management systems with emphasis placed on Belize's national chemical management framework and legislation to allow for greater coordination and collaboration among agencies and a need to ensure the enforcement of the occupation safety and health (OSH) Act, when it is enacted into legislation by the Parliament.

2. The need to invest in technology and irrigation and provide technical support to farmers while promoting the use of greener pesticides. Provide —Go Green Incentives to businesses, schools and society e.g.: for recycling products.

Longer Term Development Objectives

3. The need to ensure the sustainable management of environmental resources so that the needs of future generations are not compromised by the current levels of resource use, including the strengthening of standards, quality of management and enforcement.

4. The need to address unsustainable agricultural and forestry practices such as cultivation of steep slopes, pesticide use and unsustainable extraction of timber and other plant species as a means of mitigating against deforestation and erosion.

5. The need to increase capacity building and information sharing to promote sound management of natural resources, and the establishment of national policies with thematic foci that would assist in the negotiation of country and regional positions.

6. The need to ensure that Belize's planning process recognizes the economic value of the natural resources and environmental goods and services and provide for greater incentives for the adoption of green technologies.

7. The need to guard against adverse effects of petroleum production in this still relatively new industry.

8. The need to address Belize's vulnerability to climate change in particular the impacts of tropical cyclones and sea level rise by focusing on the need for increased readiness and mitigation, and emphasis on an ex-ante, risk management approach to disasters rather than an ex-post, reactionary approach and Belize's ability to adapt to climate change.

9. The need to integrate environmental education within the school system to allow Belizeans to develop an appreciation for Belize's Natural resources and its environment so that they could become involved in sustainable development practices.

D. CHEMICALS AND WASTE MANAGEMENT PROJECT DESCRIPTION AND STRATEGY

The project addresses several factors which affect the environment of Belize and need to be addressed to improve the natural environment and the risk to human health of its inhabitants. These factors are the presence of hazardous chemicals at industrial and agricultural sites, the use of these chemicals with incomplete understanding of the potential effects on human health and the natural environment, and the continued use of agricultural

practices that generate unintentional polluting organic compounds (UPOPs).

A summary of the need and urgency of the project is contained in this quotation from the Project Document:

> *"The economy of Belize is based on the country's natural resource endowments. At Independence, export agriculture became the mainstay of the country's economy. Changes in the demands of traditional markets have also given rise to prominence of other natural resource based/ dependent industries such as tourism, the growth of marine products (fish and lobster in particular), and the development of shrimp farming for export. Based on a national realization that the country's development is intrinsically tied to the prudent management of the environment and the country's natural resource based, decision makers formally articulated the country's commitment to pursuing a sustainable development pathway in its long-term vision for the country. Horizon 2030 recognizes the people and the environment as being at the core of the long-term development framework of the country*
>
> *The need of restructuring policy and re-organizing the chemicals policy and regulations as well as optimizing and strengthening the existing limited resources for management of chemicals with special emphasis on the importation, production, use and disposal of hazardous chemicals has been well recognized by the key government institutions."*
>
> ***Project Strategy***

The project strategy is designed around several key elements. These are:

- Preparation of a comprehensive plan to address the existing POPs and other hazardous chemicals in Belize, including POPs, PCBs and obsolete pesticides, herbicides and similar chemicals.
- Preparation of a comprehensive plan to develop facilities for effective management of municipal solid waste, or similar wastes that are amenable to collection, and subsequent disposal in a solid waste landfill
- Develop a set of project stakeholders from governmental, industry, academic, agricultural and environmental sectors that represent the major economic sectors of the Belize economy
- Implement a project communications policy that promotes co-operation, co-ordination and education among the stakeholders, project personnel, and the public, in order that full support for the project and its implementation is achieved.
- Support the continued development of regulatory and policy development at the National level, in order that a National Chemicals Strategy and Plan is finalized and approved by the Belize Parliament.

E. Analysis of the Project Document

Partnership Arrangements
It is assumed that "partnership arrangements" means the management arrangements described in the ProDoc Section VIII. This refers to the project execution arrangements made for the project.

The partnership arrangements were the following: The Department of Environment was designated as the Main Executing and Project Coordinating Agency. The Solid Waste Management Agency, the Department of Health, the Department of Agriculture, Ministry of Health and the Pesticide Control Board were designated as coordinating agencies. These coordinating agencies had the responsibility of ensuring that the alignment of the proposed actions was consistent with ongoing actions as well as planned policies and interventions in place or contemplated by the respective agency.

Clarity and Completeness of Design
The analysis of the results framework by the terminal evaluation indicated that the projects objectives and components were clear, practicable, and feasible with the overall project time frame. They were measurable, with ranges of result achievement noted. Within the framework, the targets were realistic and timely.
Capacity Evaluation and Improvement

In the project design, it was recognized that Belize entities had the basic capacity for addressing elements of the project, but that specific upgrading of capacity would be required in the areas of:

- Storage, packaging, permitting, shipment and arrangements for destruction of POPs wastes, principally PCB contaminated oils
- Design and construction of state of the practice waste transfer stations, and waste disposal landfills
- Identification and control / reduction of UPOPs, principally those generated at uncontrolled landfill sites where burning was occurring, and in the burning of agricultural wastes (principally sugar cane harvesting wastes)

To gain these capacity upgrades, the ProDoc includes discussion of the project acquiring support from national engineering and environmental firms and / or international consultants / contractors. This indicates that the capacities of the executing institutions were properly considered in the project design.

Lessons from other relevant projects
The technical evaluator did not find direct reference to lessons learned from other relevant projects, but from his previous project work with UNDP / GEF has gained a good understanding of the resources available to Country Offices, particularly the ability to access other similar projects globally, and to access the lessons that these other similar projects developed during their project implementation and execution. Thus, the Technical Evaluator assumed that relevant lessons learned were incorporated into the project design.

Counterpart Resources

As far as can be determined from review of project documents and interviews with the stakeholders, the counterpart resources for the project, as known at the initiation of the project, had been correctly defined and put in place. As with any project during its lifetime, additional resource requirements are usually identified as well as some initial resources that may not be required. Thus, it is considered that the counterpart resources were correctly defined and provided at the initiation of the project.

F. IMPLEMENTATION APPROACH AND KEY STAKEHOLDERS

Implementation Arrangements

The implementation arrangements of the project included the assignment of the Department of Environment as the Executing Agency, with UNDP Belize in the role of Oversight and Guidance. Where necessary, department personnel or consultants would be hired to fill key roles in the project execution phases.

UNDP was the Implementing Agency for the project, which had as its primary objectives:

1. Amendment of the Existing Legal Instruments and Strengthening Pesticides Law Enforcement
2. Strengthening the Capacity to Handle POPs Pesticides and Contaminated Sites
3. Raising Awareness of POPs Pesticides with Particular Reference to Waste and Contaminated Sites
    1. Undertaking Ecologically Sound Measures to Eliminate Obsolete POP Pesticides
    2. Policy and Legal Framework for the Management of Unintentionally Produced POPs (UPOPs)
    3. Capacity Building and Technical Support
    4. Municipal and Hazardous Waste Management
    5. Public Awareness and Technical Networking
    6. Landfills and Hazardous Waste Co-incineration
5. Inventory of Unintentionally Produced POPs
6. Medical Wastes Management

Specific Outcomes that were the focus of the project included:

1. Belize City Closure of open dumpsite at Mile 3/3.5 and construction of a transfer station.
2. Construction of a Regional Sanitary Landfill at Mile 24 on the Western Highway including municipal solid waste cell, hazardous waste cell, leachate ponds and lagoons, sedimentation ponds, weight bridge/wheel wash facility, administrative building, internal access road and ancillary facilities.
3. Closure of the open dumpsites serving San Ignacio/Santa Elena, Caye Caulker and San Pedro Ambergris Caye and construction of transfer stations.
4. Institutional Strengthening with staff development as well as consultancies on Design Build Engineer, Social Communication Strategy, Tariff Specialist, Auditing

Financial support during implementation was provided by UNDP, the GEF, and the European Union. The EU contribution was primarily in the support of purchase of agricultural equipment used in the preparation and execution of the sugar industry pilot demonstration projects.

ii. Key Stakeholders

The primary Stakeholders for the project included the following organizations, and their designated representatives:

Stakeholder List		
	Contact Person	**Email**
Department of the Environment		
	Martin Alegria	doe.ceo@environment.gov.bz;
	Edgar Ek	deputy@environment.gov.bz
	Jorge Franco	projects@environment.gov.bz
GEF Operational Focal Point/ Chief Executive Officer		
Ministry of Agriculture, Fisheries, Forestry, the Environment and Sustainable Development	Dr. Percival Cho	ceo@environment.gov.bz
Project Board Members		
United Nations Development Programme	Diane Wade-Moore	diane.wade@undp.org
Belize Customs and Excise Department	Lorin Frazer	lorin.frazer@yahoo.com
Fabrigas	Glenford H Baptist	gbaptist@fabrigas.bz
Ministry of Health	John Bodden	jbodden@health.gov.bz
Belize Natural Energy	Albert Roches	aroches@bne.bz
Pesticides Control of Belize	Miriam Serrut	miriam.oserrut@pcbbelize.com
Solid Waste Management Authority	Emmerson Garcia	emmersongarcia_15@yahoo.com or swtech@solidwaste.gov.bz
University of Belize	Juliane Pasos	jpasos@ub.edu.bz
Ministry of Economic Development	Kimberley Westby	Kimberley.Westby@med.gov.bz
Belize Agricultural Health Authority (BAHA)	Kenrick Witty	kenrick.witty@baha.org.bz
Sugar Industry Research Institute (SIRDI)	Marcos Osorio	marcos.sirdi@gmail.com
Technical Working Group Expert	Erasmo Franklin	ejfranko@gmail.com
	Mario Fernandez	marfer1605@yahoo.com

From the interviews with stakeholders, it was evident that the principal stakeholders had a high degree of engagement with the project as compared with that planned in the ProDoc ("the responsibility of ensuring that the alignment of the proposed actions was consistent with ongoing actions as well as planned policies and interventions in place or contemplated by the respective stakeholder entity").

Examples would be

- The active participation of the stakeholders in attending and contributing to the steering committee meetings, as expressed by a majority of the stakeholders
- Voluntary participation by the Sugar Institute in the planning effort for pilot project(s) that would lead to the reduction or elimination of the burning of sugar cane waste, which generate Unintentional POPs
- The active participation of the Belize Customs and Excise Department in facilitating the necessary permits for export of POPs and PCB contaminated oils to a destruction facility in France
- The active participation of the Solid Waste Management Agency in planning for the construction of the National Solid Waste Landfill, and in the management of the closing of the uncontrolled waste facilities in which burning of wastes was occurring

E. Key Milestone Dates

The key milestone dates at the time of inception of the project included:

Project Approval	:	August 2014
Project Initiation	:	September 2014
Project Mid-Term Review	:	Mid - 2015
Project End	:	Mid - 2017

In actuality, the project did not get fully initiated until early 2015, due to the need to complete several tasks, and did not end until December 2018. The Mid-Term Review was not completed, in order to preserve the revised schedule target of end of 2017. However, careful project management was able to achieve the necessary results within the overall budget.

I. RELEVANCE

A. RELEVANCE OF THE CHEMICALS AND WASTE MANAGEMENT PROJECT OBJECTIVE

Relevance to GEF Strategic Objectives

The project is directly relevant to three major GEF strategic objectives, those of:

1. Elimination of POPs chemicals and other obsolete pesticides, herbicides and hazardous chemicals from countries that still retain those substances within their boundaries

2. Management of solid wastes in an environmentally sustainable manner, thereby reducing the health hazard and environmental impacts that uncontrolled or poorly managed solid wastes can have on the inhabitants, human and natural environments of the country or regions.

3. Improvement of the livelihoods of the country's citizens

Relevance to National Strategies and Local Priorities

The project was also relevant to the national strategies and local priorities of the country, in that it addressed the following:

1. Achievement of an initial phase of solid waste management, including construction of well-designed waste transfer stations and a central landfill, including a hazardous waste isolation cell

2. Closure of six major uncontrolled waste dumps, and cessation of waste burning at those dumps

3. Collection, packaging and transport of known existing POPs and other highly hazardous chemicals to a destruction site in France

4. Establishment of pilot projects in the sugar industry that demonstrate the effectiveness of mechanical harvesting, fertilization, and pest control on small sugar farmer plots, thus eliminating the need for burning of the cane fields before and after harvesting

5. Development of additional capacity in the chemicals and solid waste management area

Relevance of UNDP Country Strategies and Priorities for Belize

As noted in the previous section, the National Strategies and Local Priorities of Belize co-incide with the UNDp Country Strategies and Priorities for Belize, in the Environmental sector.

B. Relevance of the Project Approach: Project Strategy and Design

The relevance of the project approach, project strategy and design to the objective of the project and implementation of the project to achieve that objective and the subset of outcomes was well thought out, structured and organized. No deficiencies were found in this respect.

Project Management and Cost-effectiveness (Efficiency)

Implementation, Including UNDP Oversight

Implementation Arrangements

Day to day project management was managed by a project manager, with support from a project assistant, with the project team based in an office building of the Department of Environment. However, direct oversight of the project management and implementation was carried out by the Department of Environment, as the project manager was contracted by Government of Belize (for duty within the Department of Environment). The project then contracted / seconded a suite of national experts to carry out project activities and generate the respective output deliverables in the form of technical reports.

A Project Board (PB), drawn from the principal stakeholders, served as the executive decision-making body for the project, as per the Prodoc in general, the function of the Project Board is to meet the following GEF guidance:

> *"The Project Board will be the executive decision-making body for the project, providing guidance to the Project Manager and approving project revisions, annual work plans and budgets. It will be responsible for reviewing project progress reports, the risk log, issue log and the monitoring and communication plan. The Project Board (PB) is responsible for making management decisions for a project in particular when guidance is required by the Project Manager. The Project Board plays a critical role in project monitoring and evaluations by quality assuring these processes and products, and using evaluations for performance improvement, accountability and learning. It ensures that required resources are committed and arbitrates on any conflicts within the project or negotiates a solution to any problems with external bodies. In addition, it approves the appointment and responsibilities of the Project Manager and any delegation of its Project Assurance responsibilities. Based on the approved Annual Work Plan, the Project Board can also consider and approve the quarterly plans (if applicable) and also approve any essential deviations from the original plans."*

The Department of Environment was the Implementing Partner for the project
Implementation Arrangements
From the interviews with the Stakeholders and project implementation staff, it was established that:

The project team (Implementing Partner and Executing Agency) had an appropriate focus on results, with adequate support from UNDP to the implementing partner and project team members. The quality, timeliness and technical support to the executing agency was judged to be appropriate and responsive.
From review of the Quarterly Reports, it was apparent that a high level of candor and realism existed in reporting during the project, and that an appropriate level of risk consideration and response was observed.

Project delays were dealt with in a responsive and adaptive management approach and had little effect on the project outcomes. A high level of communication was evident between the Implementing Partner and the Executing Agency, leading to the success of the project.

Execution, Including Stakeholder Ownership

Project Management

The project was completed under National Implementation (NIM) modality arrangements. This means that the project management unit (the project manager and project assistant) was primarily accountable to the government execution partner, the Department of Environment. At the same time, the UNDP Country Office was responsible for providing implementation support and strong oversight.

According to project stakeholders and participants (and as validated by the terminal evaluation), the project management team executed the project with a high degree of professionalism, transparency, communication, commitment, and enthusiasm. There was some delay in the initiation of the project, due to a change in senior project manager. Despite this challenge, the project management team persisted and prevailed, achieving the required outputs from the project.

Stakeholder Ownership / Partnership

As of the terminal evaluation, the key stakeholders at the local and regional level have become fully engaged with the project activities and have assumed ownership of the results - and the sustainability of those results. At the national level, the government technicians directly involved in the project activities have certainly taken ownership for the project results. For example, during the terminal evaluation the SIRI staff members directly responsible for agricultural initiative directed toward mechanical harvesting and fertilization / biocide application, were able to clearly demonstrate their capacity for conducting this work on a sustained basis after project completion. There remains, however, less certainty about the sense of "urgency" at the higher levels of government with respect to passage and enforcement of regulations and policy on chemicals and solid waste.

From the interviews with the project Stakeholders, it was evident that they were in strong partnership at the regional and local level, for example in:

- The planning of the pilot projects for reduction or elimination of sugar cane waste burning (SIRI, regional)
- The planning and construction of the Waste Landfill and Waste Transfer Stations (Solid Waste Management Agency, regional)
- The closure of the uncontrolled waste facilities (Solid Waste Management Agency, regional)

The stakeholder participation at the national level was primarily evidenced in the participation of the Department of Environment and the Pesticide Control Board in the packaging, permitting, shipment and destruction of PCB contaminated oils to France for destruction.

The project's partnership approach was judged to be strong at the regional, local level and national level – with the strongest links at the regional and local levers, which was to be

expected. There did not appear to be any significant civil society partnerships established. From the interviews with the project Stakeholders, it was evident that they were in strong partnership at the regional and local level, for example in:

- The planning of the pilot projects for reduction or elimination of sugar cane waste burning (SIRI, regional)
- The planning and construction of the Waste Landfill and Waste Transfer Stations (Solid Waste Management Agency, regional)
- The closure of the uncontrolled waste facilities (Solid Waste Management Agency, regional)

The stakeholder participation at the national level was primarily evidenced in the participation of the Department of Environment and the Pesticide Control Board in the packaging, permitting, shipment and destruction of PCB contaminated oils to France for destruction.

Risk Assessment and Monitoring

The Project Results Framework noted a set of risks that had to be considered during the inception and implementation of the project. These risks were:

- ***Delay in adoption of the project by the Government, as overlapping mandates of ministries might not be resolved***.

  This risk was mitigated by the multi-stakeholder nature of the project and frequent meetings with various ministries and departments to ensure that they understood the focus of the project, and how its implementation would support and promote their individual mandates
- ***Delays in the shipment and disposal of POPs and other dangerous chemicals, due to difficulty finding a shipping line for transport***

  This risk was mitigated by involving the Customs and Excise Department, as well as a well- qualified and recognized POPs disposal firm (Polyeco) to assist in identification of a shipping line, management of the requisite permits, and contracting of the destruction firm in France (Tredi)

During the course of the project, monitoring of the project activities was maintained to identify any current or future risks to project progress. No significant risks were identified, and the project proceeded without undue delay.

Flexibility and Adaptive Management

FLEXIBILITY IS ONE OF THE GEF'S TEN OPERATIONAL PRINCIPLES, AND ALL PROJECTS MUST BE IMPLEMENTED IN A FLEXIBLE MANNER TO MAXIMIZE EFFICIENCY AND EFFECTIVENESS, AND TO ENSURE RESULTS-BASED, RATHER THAN OUTPUT-BASED APPROACH. THUS, DURING PROJECT IMPLEMENTATION ADAPTIVE MANAGEMENT MUST BE EMPLOYED TO ADJUST TO CHANGING CIRCUMSTANCES.

From the stake-holders perspective of the end of the project, the project's adaptive management has been more than satisfactory, at least during the second half of the project. The initiation of the

project experienced less than ideal relationships between the initial project manager and certain government agencies / departments. Adaptive management was applied and solved the problem. From the stakeholder's perspective at the end of the project, as expressed in interviews, the project's adaptive management has been more than satisfactory, at least during the majority of the project. The initiation of the project experienced less than ideal relationships between the initial project manager and certain government agencies / departments. Adaptive management was applied and solved the problem.

Evidence of adaptive management during the project included:

- The adaptive response of the SIRI sugar cane burning pilot project to the sugar cane farmer who owned and managed the sugar cane plot selected, requested for inclusion of the use of fertilizer and pesticide injection techniques in the pilot project. These were included and successfully demonstrated to sugar cane farmers in the region
- The adaptive response of SIRI to the request of the sugar cane farmers in the region for procurement of equipment, and rental of that equipment to the farmers, that would mechanize the application of pesticides and fertilizers to their fields. SIRI procured funds for this equipment, purchased it and has an active program of rentals to the farmers
- The adaptive response of the Solid Waste Agency to the issue of separation of recyclable waste materials from wastes received at the National Landfill. This was resolved by the issuing of "permits" to several local contractors (individuals) granting them permission, on a non-interference basis" to collect and separate recyclable materials at the landfill

With respect to the "less than ideal relationships between the initial project manager and certain government agencies / departments" comment in the text, it was described to the terminal evaluator that the initial Project Manager selected had a "command and control" personality and was encountering difficulty in his relationships with the stakeholders and project staff. Adaptive management by the UNDP and the Ministry of Environment was used to resolve this situation, by selection of a replacement Project Manager.

Financial Planning by Component and Delivery

TABLE 4, FOLLOWING, PRESENTS THE FINANCIAL BUDGET AND COMPILATION OF EXPENDITURES ON SPECIFIC OUTCOMES AND ACTIVITIES ON AN ANNUAL BASIS DURING THE LIFE OF THE PROJECT. THE END OF PROJECT ACTUAL EXPENDITURES FOR EACH OUTCOME ARE REPORTED AS BEING WITHIN TEN (10) PERCENT OF THE ORIGNIAL / MODIFIED BUDGETS FOR EACH OUTCOME. THIS DEMONSTRATES THAT THE FINANCIAL MANAGEMENT AND CONTROLS FOR THE PROJECT WERE WELL PLANNED AND EXECUTED.

Table 4 - Annual and End of Project Budget and Financial Performance

Financial Overview (only GEF funds)

Outcome	2015	2016	2017	2018	2019	Total Budget
Outcome 1: Environmentally sound management and regulatory strengthening of chemicals and waste, including POPs						
Total Project Budget as in PRODOC	**249,000.00**					**249,000.00**
Anual Work Plan (as in Atlas)	79,000.00	285,565.00	205,730.00			
Expenditures (As per CDR)	27,774.29	39,886.47	201,844.56			**269,505.32**
Total Fund Balance	221,225.71	181,339.24	-20,505.32			**-20,505.32**
Delivery Rate	**35%**	**14%**	**98%**			**108%**
Outcome 2: Dioxin release reduction in waste management operations and agriculture						
Total Project Budget as in PRODOC	**610,000.00**					**610,000.00**
Anual Work Plan (as in Atlas)	482,000.00	12,000.00	85,093.99	25,000.00	157.86	
Expenditures (As per CDR)	483,307.35	10,724.99	64,710.98	31,270.91		**590,014.23**
Total Fund Balance	126,692.65	115,967.66	51,256.68	2,500.00		**19,985.77**
Delivery Rate	**100%**	**89%**	**76%**			**97%**
Outcome 3: Monitoring, learning, adaptive feedback, outreach, and evaluation						
Total Project Budget as in PRODOC	**41,000.00**					**41,000.00**
Anual Work Plan (as in Atlas)	2,500.00	12,000.00	19,025.00	13,100.60	11,577.21	
Expenditures (As per CDR)	12,000.00	10,029.14	5,192.85	1,523.39		**28,745.38**
Total Fund Balance	29,000.00	18,970.86	13,778.01			**12,254.62**
Delivery Rate	**480%**	**84%**	**27%**	**12%**		**70%**
Project Management (PMC):						
Total Project Budget as in PRODOC	**90,000.00**					**90,000.00**
Anual Work Plan (as in Atlas)	32,000.00	38,514.00				
Expenditures (As per CDR)	63,413.35	33,015.42		-6,428.77		**90,000.00**
Total Fund Balance	26,586.65	-6,428.77				**0.00**
Delivery Rate	**198%**	**86%**				**100%**
Grand Total						
Total Project Budget as in PRODOC	**990,000.00**	**0.00**	**0.00**	**0.00**	**0.00**	**990,000.00**
Total Anual Work Plan (as in Atlas)	**595,500.00**	**348,079.00**	**309,848.99**	**38,100.60**	**11,735.07**	
Total Expenditures (As per CDR)	**586,494.99**	**93,656.02**	**271,748.39**	**26,365.53**	**0.00**	**978,264.93**
Total Fund Balance	**403,505.01**	**309,848.99**	**38,100.60**	**11,735.07**	**11,735.07**	**11,735.07**
Total Delivery Rate	**98%**	**27%**	**88%**	**69%**	**0%**	**99%**

Variances

It was evident from reviewing the Quarterly Stage Plans that there was close attention to the management of funds by the UND Belize office, with requests for incremental funding over the project period being reviewed by UNDP financial analysts and procurement personnel.

Planned and Actual Co-financing

At the initiation of the project, it was planned that the project would receive Co-financing from the GEF, and from UNDP Belize TRAC funds. These were to the amounts of:

TRAC: $ 30,442
GEF : $ 990,000

Subsequently, funds were made available from the European Union, to support the purchase of equipment and supplies for the SIRI pilot demonstrations projects focused on Green Harvesting of sugar cane and the elimination of burning of the cane fields before and after harvesting. The total amount of funds made available to SIRI is not known to the terminal evaluator.

The project outcomes were achieved with the co-financing provided during the project or

exceeded in the case of the sugar industry component of the project. The sustainability of the project outcomes will be supported by the successful completion of the project outcomes, and any co-financing that is received, as a result of the public acceptance of the project components, the receptivity of the National Legislature of any requests for co-financing of future sustainability initiatives, and the receipt of grants or specific co-financing from internal or international entities who wish to support further activities on the several initiatives that may develop

Monitoring and Evaluation

Monitoring and Evaluation
At the outset of the project, a Monitoring and Evaluation Inception Workshop was held, with participation from the Implementing Partner and Executing Agency, and representatives of the Stakeholder group. This allowed the guidelines to be worked out and implemented for the M&E program. From review of the Quarterly Reports, it is evident that adequate attention was paid to the M&E requirements and reporting of M&E activities is present in all Quarterly Reports.
Adaptive management was applied to any issues that required attention, if reported in the Quarterly Reports.

M&E DESIGN

The monitoring and evaluation framework for the project is contained in the Project Document. This indicated that a project results framework and tracking tool were to be developed and used throughout the project, with quarterly results noted and reported in the Quarterly Reports for the project. A budget was provided, and the necessary finances made available to the project.

QUARTERLY REPORTING INCLUDED PREPARATION OF UPDATES TO THE PROJECT RISK LOG WHICH WOULD BE REVIEWED BY THE PROJECT STEERING COMMITTEE, WITH NECESSARY ADJUSTMENTS TO THE M&E DESIGN MADE AS APPROPRIATE.

M&E IMPLEMENTATION

Review of the quarterly reports provided to the Terminal Reviewer confirms that the M&E program was initiated and followed by the project management and staff and reviewed on a quarterly basis by the steering committee.

VI. EFFECTIVENESS AND RESULTS: PROGRESS TOWARD THE OBJECTIVE AND OUTCOMES

BASELINE INDICATORS WERE ESTABLISHED IN THE PROJECT DOCUMENT LOGICAL FRAMEWORK, THAT WOULD PROVIDE MILESTONE POINTS THAT CONFIRM PROGRESS OR ACHIEVEMENT OF THE PROJECT OBJECTIVES / OUTCOMES. THESE INDICATORS AND THE PROGRESS OF THE PROJECT IN ACHIEVING THEM ARE CONTAINED IN TABLE 5, FOLLOWING:

Table 5 - Achievement of Objectives / Outcomes

Objective / Outcome	Indicators	Level of Achievement
Reduce Releases of POPs; increasing Capacity for Waste and Chemicals Management	Chemicals Bill Legally in Force	The National Chemicals Management legislation is before the Parliament, but has not been put in place
Institutional Capacities Increased Through Policies and Regulatory Framework	Number of Official Meetings of National Integrated Management Authority	Not reported in documents reviewed
	Number of Base Regulations and POPs Specific Guidelines Adopted	Not reported in documents reviewed
	Number of Inspections to Enforce POPs Regulations	Not reported in documents reviewed
	Training Days of Inspectors and Authorities for Enforcement of Chemicals Bill	Not reported in documents reviewed
Management and Disposal of Existing POPs Waste	Successful Export and Disposal of Existing POPs Waste	Completed
Measurable Reduction in Dioxin Released from Formal and Informal Waste Dumps	Tonnage of Waste Being Uncontrollably Burned at Waste Sites – Western Corridor	Not reported in documents reviewed
	Number of Waste Dumps Closed and Transfer Centers Built and Operational	All significant waste dumps closed, transfer stations constructed
Reduction of UPOPs Releases from Uncontrolled, Open Burning of Agricultural Waste	Sugar Cane Area Under Green Harvesting Among Small Holding Farmers	Pilot demonstration initiated, estimated at 5 acres
	Tonnage of Sugarcane Green Harvesting	Pilot demonstration initiated, number of tons not reported
	Price of Green Harvested Sugarcane	Negotiations ongoing with care buyers on price of green harvested sugarcane
Monitoring, Learning, Adaptive Feedback, Outreach and Evaluation	Adaptive Management Applied to Project in Response to Needs	Adaptive management applied as required, outreach to stakeholders / public initiated

Impacts and Global Environmental Benefits

The beneficial effect on the environmental situation in Belize includes the following:

- Reduction in the burning of sugarcane harvesting wastes, with lessened particulates and UPOPs generation in the sugar cane region. Additional potential environmental health considerations could result from the lessened emissions
- Reduction / elimination of uncontrolled solid waste dumps, resulting in lessened UPOPs or other environmentally harmful chemicals effects on water and air in the vicinity of these dumps. Probable additional reduction of disease carrying rodents near the dump locations
- Reduction / elimination of random dumping of solid waste in the natural environment
- Removal of PCB contaminated oils from Belize, reducing the chance of accidental spills
- Collection and secure storage of DDT, until it can be safely disposed of, reducing the chance of improper use of this pesticide
- Increase in the general awareness of the public regarding proper waste management
- Initiation of legislation regarding plastics wastes, with future significant impact on the use of these materials and resulting beneficial effects to the environment

The project has had a definite and beneficial effect on the enviromental situation in Belize and has also set a standard that can and may be replicated in surrounding Carribean countries that lack the chemcials and waste management legialative and policy insturments in place that Belize now has. Neighboring countries to Belize would benefit greatly from replication, and the benefits would also return to Belize, through management of wastes that are now disposed of in rivers that flow into Belize or feed shoreline pollution that migrates to Belize.

Summary of Ratings for Outputs / Activities

A tabulation of all ratings of the Outputs and Activities noted for the project is presented in Table , following:

Table 6. Ratings of All Key Category Elements

Evaluation Category	Key Category Elements	Ranking

Monitoring and Evaluation	M & E plan generated and followed throughout project, adaptations made as required	HS
M&E Design at Entry	M&E plan developed with scheduled events, evaluators identified, reporting formats	S
M&E Plan Implementation	M&E implemented, correct procedures followed, results reported, adaptation implemented	HS
Overall Quality of M&E	Evaluation of the overall M&E implementation, results, adaptations successfully implemented	HS
IA and EA Execution		
Quality of UNDP Implementation	UNDP Manager provides oversight and guidance, monitors budget and schedule	HS
Quality of Execution Implementing Agency	Dept of Environment Manager provides daily management, guidance, and implementation	HS
Overall Quality of Implementation / Execution	Project implementation met original expectations, UNDP and Stakeholder guidance proactive and accepted Rated Evaluation Factors	HS
Assessment of Outcomes		
Strategic Relevance	Project consistent with national needs, needs of stakeholder groups, UNDP/ GEF mandate	S
Efficiency	Project success in achieving programmed outputs, usefulness and timeliness	S
Effectiveness	Project products available to stakeholders, met needs of solid waste and chemicals sector	HS
Overall Project Outcome	Project outcomes reached with all aspects considered and implemented	MS
Sustainability		
Financial Resources	Well-designed financial plan and budget, continued monitoring, met budget goals	HS
Socio-Political	Wide base of stakeholders, good public communication, political awareness	S
Institutional Framework and Governance	Stakeholder ownership sufficient to sustain initiative into National programs in sectors	S
Environmental	Project environmentally responsive, positive impact on natural and man-made environment	S
Overall Likelihood of Sustainability	Project consistent with country goals and initiatives, results being adopted into legislation	ML
Evaluation Category	**Key Category Elements (Not Included in TOR)**	

Replication Potential	Project conceptual framework can be applied to other chemicals and agricultural areas / issues	S
Stakeholder Participation	Stakeholder board representative of industries, high degree of participation and enthusiasm	HS
Country Ownership	Input from stakeholder representatives of Governmental Agencies indicates high	S
Overall Project Rating	**Summary Rating of Project Considering all Rating Factors**	**HS**

Ratings Summary Comments

Comments relevant to the scoring of the ratings for each of the evaluation criterion are contained in the following table, Table 6

Table 7. : Ratings Summary Comments

Evaluation Criterion	Summary Comments
Relevance	The project was highly relevant in meeting the objectives of the UNDP, GEF and the Government of Belize, in responding to the development objectives of increasing capacity in chemicals and solid waste management, elimination of POPs chemicals from Belize, and reduction of dioxin / UPOPs generation from the elimination of burning of wastes at waste dumps. It also has resulted in the preparation and initiation of pilot projects which will reduce and hopefully eventually eliminate burning of agricultural harvesting wastes in the sugar industry. Its design was satisfactory, and the project document contains a convincing approach to address the existing problems.

Efficiency	The project was almost totally effective in achieving its expected outcomes. The project was able to utilize its resources to achieve good results and contribute toward the first objective of the project, the increasing of capacity in chemicals and solid waste management at the national level. All known existing POPs have been destroyed, and good progress is being made toward elimination of dioxins/ UPOPs from burning of wastes and agricultural residues. With respect to capacity development, the project was effective in increasing capacity in the solid waste sector, through the construction and operation of the transfer stations and the landfill, as this: o Increased the capacity of the engineering design sector / firms through their experience on the design and construction phases o Increased the capacity of the waste transport, environmental monitoring, and waste segregation (partial) sectors due to their experience at the waste transfer stations and the landfill o Increased the closure and closed waste dump monitoring capacity, due to the experience gained by participants / entities that participated in these areas The national capacity in the management of agricultural wastes was increased due to the: o Participation of the Department of Environment staff, and the Sugar Institute Research Staff in the design of the demonstration of the pilot sites for "limited or no burning" of sugar cane harvesting wastes o Participation of the selected small farmers who agreed to allow use of some of their sugar cane plots for the demonstrations o Circulation and publication of the results of the pilot demonstration results to other small and large farmers in the sugar cane industry The project was well managed, and the resources utilized efficiently. It used adaptive management as necessary to secure project outcomes while maintaining adherence to the overall project design. The project management team used the Project Plan as a guide to implement the project. The project finances were managed by the UNDP and Department of Environment and were adequate. The technical assistance team was well qualified to implement the project; was highly motivated toward goal achievement; used/developed the capacity of the national departments; and developed excellent relationships with the project stakeholders. The project delivery mechanisms were good with good oversight of the progress of the project. The implementation approach emphasized a strong participation of stakeholders and most of the project achievements are owned by the relevant stakeholders.
Environmental	The environmental impact of the project is significant. It has resulted in the elimination of most of the large to medium sized uncontrolled waste dumps, and the burning that was occurring at those dumps. It accomplished the removal and destruction of POPs chemicals from Belize, and significantly raised the awareness of chemicals users regarding the hazardous nature and health effects of those chemicals. The project has resulted in a series of waste

	transfer stations, feeding a national landfill. Roadside and individual household waste is still an issue that needs more attention, but public education is ongoing in these areas. The success of the project has encouraged other sectors of the Belize economy to start to review their environmental practices, which may lead to replication of the framework of the Chemicals and Waste Management project to these other sectors.
Country Ownership	The country ownership of the project appears to be widespread. It is recognized by the governmental departments and ministries is that were involved in the project as a model that can be replicated in other environmental aspects within their responsibility. The Belize Parliament in the process of moving a Strategic Chemicals plan through towards final implementation, with corresponding policy and enforcement provisions, this is indicative of country ownership at the highest level.
Sociopolitical Risks	Socio politically the project is judged to have achieved a position that can be expanded on to reach all sectors of the population, the initiatives in chemicals and solid waste addressed issues that are of concern to most of the citizens. There does need to be more progress with respect to the bottom tier of the population, which is economically unable to address their issues of solid waste, small rubbish dumps that may still be burned, and the educational requirements to make them aware of the hazardous nature of many industrial and household chemicals.
Financial	Based on review of the Financial Audit of 2015, and subsequent review of the financial performance of the project as noted in the Quarterly End Stage Reports, the project has performed very well in management of expenditures, and adherence to quarterly and annual budget revisions. It is very apparent that the Department of Environment and UNDP Project Managers / Oversight Manager kept close review of the financial aspects. Review of several Requests for Bids send to prospective firms and individuals revealed that they were well constructed, reviewed and conducted in an ethical manner.

Conceptualization/ Design	The project document approved by UNDP and other parties contains an adequate justification and convincing approach to address the Solid Waste issues in Belize, as well as the elimination of POPs chemicals. It notes the t need for increased capacity at all levels and lays out a logical path toward achievement of that capacity. The logic of the project strategy was well laid out in the project document. The initiation plan contained the logic of project intervention; including the expected outputs and the major activities to be implemented. It also included performance indicators which were used during the implementation of the project to measure progress.
Stakeholder participation (in project formulation)	The participation of stakeholders in project formulation was encouraged by the project team. There were some concerns expressed by stakeholders that they felt that more consultations may have increased the levels of communication and coordination in the early stages of the project. The

	relevant national institutions were engaged during this design phase. From the interviews with stakeholders, it was evident that the principal stakeholders had a high degree of engagement with the project as compared with that planned in the ProDoc ("the responsibility of ensuring that the alignment of the proposed actions was consistent with ongoing actions as well as planned policies and interventions in place or contemplated by the respective stakeholder entity"). Examples would be o The active participation of the stakeholders in attending and contributing to the steering committee meetings, as expressed by a majority of the stakeholders o Voluntary participation by the Sugar Institute in the planning effort for pilot project(s) that would lead to the reduction or elimination of the burning of sugar cane waste, which generate Unintentional POPs o The active participation of the Belize Customs and Excise Department in facilitating the necessary permits for export of POPs and PCB contaminated oils to a destruction facility in France o The active participation of the Solid Waste Management Agency in planning for the construction of the National Solid Waste Landfill, and in the management of the closing of the uncontrolled waste facilities in which burning of wastes was occurring
Coherence	The coherence of the project is rated as satisfactory. To be able to bring coherence to a project that involves a significant number of stakeholders and requires strong planning, communication and management skills. The UNDP and the stakeholders have done this well.
Implementation Approach	See Efficiency above
Monitoring and Evaluation	The monitoring and progress reporting of the project was done according to UNDP procedures. The indicators measured well the actual progress made toward the achievements of the expected results. The progress of the project was also reported in the annual reports by measuring its contribution against the UNDP strategic targets in management of chemicals and solid wastes, through construction of the solid waste facilities, closure of open dumps, elimination of open dump burning. Additionally, the progress of elimination of burning of agricultural harvest wastes in the field was demonstrated as being feasible and to the economic advantage of the small sugar cane farmers
Stakeholder Participation (in project implementation)	Stakeholders responded well to the needs of the target groups at national and local levels. During the first phase of the project to prepare the documents for the creation of the National Program, the relevant institutions appear to have been appropriately engaged in the process. From the interviews with the project Stakeholders, it was evident that they were in strong partnership at the regional and local level, for example in:

	○ The planning of the pilot projects for reduction or elimination of sugar cane waste burning (SIRI, regional) ○ The planning and construction of the Waste Landfill and Waste Transfer Stations (Solid Waste Management Agency, regional) ○ The closure of the uncontrolled waste facilities (Solid Waste Management Agency, regional) The stakeholder participation at the national level was primarily evidenced in the participation of the Department of Environment and the Pesticide Control Board in the packaging, permitting, shipment and destruction of PCB contaminated oils to France for destruction.
	The approach that is being used to implement the sub-activities emphasized the development of local capacities and was based on a strong participation of local stakeholders. As a result, the achievements of these sub-projects will be owned by the recipient stakeholders and the long-term sustainability of these achievements should be guaranteed.
Evaluation Criterion	**Summary Comments**
Sustainability	The sustainability of the project achievements is dependent on the continued support and financial resources made available to the available to the ministries, departments and entities that may be charged with or have interests in sustaining the results of the project. The support and financial resources could be in- kind services or grant funding". However, the project achievements are sustainable. In the solid waste sector, the construction of the transfer stations and landfill are certain to lead to sustainable operations. The public has been educated regarding the hazards of open burning of wastes in uncontrolled dumps and this should diminish and disappear over time. The pilot projects using mechanical harvesting, fertilization and biocide distribution have proven advantageous to the farmers doing the pilot and should gradually be accepted by the small holder farmers. In addition to sustainability, the replication and scaling-up potential of the project is good. The project concept, lessons learned, and best practices can be applied to all regions of the country.
Evaluation Criterion	**Summary Comments**
Attainment of Outcomes	See Effectiveness above.
Achievement of Objective	See Effectiveness above

Overall Rating	Overall, the achievements of the project are excellent. The project contributed to the development of the capacity of many people and organizations that are responsible for chemicals, solid waste collection and disposal; and generated, through partnership with the Sugar Industry Research Institute a viable program that the SIRI is implementing with the co-operation of several of the small sugar cane farmers, this is projected to grow to include a high percentage of the farmers, as it offers efficiency and economic benefits.

Key GEF Performance Parameters

Sustainability

The sustainability of the project results into future phases of environmental protection, has been judged to be excellent. There are, however, a set of risks that should be understood and addressed if the results of the project and its approach are to be extended geographically to other regions of Belize or to other environmental factors (other than chemicals and solid wastes) that exist or may develop in Belize.

Financial Risks

Any future program that addresses the chemicals and solid waste issues in other parts of Belize, or which addresses enviromnetal issues similar to those of the project, and wants to carry sustainablity forward, will require adequate financing. The Government of Belize, at the present time, has other competing programs for funding, and may not be able to place much funding toward environmental issues. Thus, expernal funding from UNDP, GEF,the European Union, or other funding sources will be required. This is at least a moderate risk to sustainability of the program.

Socio-political Risks

Socio–political risks are judged to be low, as the populace would undoubtedly welcome any programme that addresses the well-being of the citizens of Belize or improves the state of the environment. The long-term economic growth of Belize (next 10 to 20 years) will be in large part controlled by the growth of the tourism and agricultural sectors, with light industry growth having significant input. These sectors will require well managed waste and chemicals management, agricultural adoption and adaptation of improved agricultural methods, and preservation of the natural environment (forest, water, air, biota, and fisheries}. Unless there is severe disruption of the socioeconomic or political situation current in Belize, the sociopolitical risks are judged to be low. No evident severe risks have been identified by the technical evaluator, nor by the stakeholders interviewed.

Institutional and Governance Risks

Institutional and governance risks could be significant to the sustainability of the project objectives. Legislators and policy setters have many issues to address and may feel that the waste and chemicals situation in the country has been addressed for the time being. Any new project to extend the consideration of sugar cane harvesting hazards, or address smaller solid waste issues, may not get institutional and governance attention.

Environmental Risks

The environmental risk is judged small, as there is reported to be strong support for programs that continue to improve the environment of Belize
Impacts and Global Environmental Benefits
The beneficial effect on the environmental situation in Belize includes the following:

- Reduction in the burning of sugarcane harvesting wastes, with lessened particulates and UPOPs generation in the sugar cane region. Additional potential environmental health considerations could result from the lessened emissions
- Reduction / elimination of uncontrolled solid waste dumps, resulting in lessened UPOPs or other environmentally harmful chemicals effects on water and air in the vicinity of these dumps. Probable additional reduction of disease carrying rodents near the dump locations
- Reduction / elimination of random dumping of solid waste in the natural environment
- Removal of PCB contaminated oils from Belize, reducing the chance of accidental spills
- Collection and secure storage of DDT, until it can be safely disposed of, reducing the chance of improper use of this pesticide
- Increase in the general awareness of the public regarding proper waste management
- Initiation of legislation regarding plastics wastes, with future significant impact on the use of these materials and resulting beneficial effects to the environment

Gender Equality and Mainstreaming

The review of the documents provided for the Terminal Review, and the interviews conducted indicate that gender equality was not directly addressed during the project life, although the benefits of the project support gender equality. The staffing of the project was consistent with full gender considerations. Mainstreaming of gender equality was not specifically a programmatic element.

Main Lessons Learned and Recommendations

Lessons Learned from the Experience of the Chemicals and Waste Management Project

THE FOLLOWING ARE LESSONS LEARNED DURING THE PROJECT, AS REPORTED IN THE QUARTERLY END STAGE REPORTS, OR BY THE STAKEHOLDERS DURING THE TERMINAL EVALUATION INTERVIEWS.

- FLEXIBILITY SHOULD BE INCLUDED IN PROJECT EXECUTION AND DECISION MAKING, AND BUILT INTO THE PROJECT SCHEDULE, TO ALLOW FOR MAKING ADJSTMENTS IN SCHEDULE OR PROGRAM IMPLEMENTATION, AS THE NEED OCCURS. A HARD AND FAST PROJECT SCHEDULE OR EXECUTION PLAN CAN LEAD TO SEVERE CONSEQUENCES TO THE SUCCESS OF A PROJECT

- When facilities are to be constructed or equipment procured, additional funding contingency should be provided or allocated in the initial or revised budgets. This would avoid having to justify and obtain additional funding, which may be difficult to get

- For the Chemicals and Solid Waste Project, given its complexity and the fact that facilities were to be designed and constructed, the schedule should have been four years instead of three
- Green harvesting of sugar cane would be more attractive is the price of green harvested sugar cane were at a premium price. This would probably require that "green harvested" granular sugar command a premium price at the sales outlet (grocery or wholesale stores), which in turn would have to experience a demand by the end buyers. Difficult but not impossible
- Shareholder incentive is best maintained through an accelerated decision-making process

Recommendations for Consolidating Results and Supporting Sustainability of the Project

- Provision should be made in the near future for incentives to enable the separation and recycling of e-waste (this is understood to be considered in the near future)

- The issue of roadside waste (litter, agricultural waste, rural road solid waste), should be addressed in a subsequent follow-on initiative

- A strategy for plastics wastes needs to be developed and implemented (this is reported to be under consideration by Parliament, and scheduled for enactment in April 2019)

- More public education on the issues of solid waste, chemicals, and environmental protection would be beneficial to all segments of the population of Belize
- The issue of expanding the elimination of burning of agricultural sugar cane harvesting waste should be discussed with SIRI, and a program of promoting the initiative adopted
- A review should be made, and conclusions drawn regarding the feasibility of obtaining a higher price for “Green Sugar Cane”
- The government and SIRI should initiate discussions on expanded purchase and rental of mechanized equipment for pesticide and fertilizer application to sugar plantations, this would result in lessened volumes of pesticides and fertilizers being used, with corresponding reduction in costs to the farmers.

ANNEX A: Terms of Reference

TERMINAL EVALUATION TERMS OF REFERENCE

INTRODUCTION

In accordance with UNDP and GEF M&E policies and procedures, all full and medium-sized UNDP support GEF financed projects are required to undergo a terminal evaluation upon completion of implementation. These terms of reference (TOR) sets out the expectations for a Terminal Evaluation (TE) of **the *Belize Chemicals and Waste Management Project 00089331 (PIMS #5094.)***

The essentials of the project to be evaluated are as follows:

PROJECT SUMMARY TABLE

Project Title:	Belize Chemicals and Waste Management Project			
GEF Project ID:	5094		*at endorsement (Million US$)*	*at completion (Million US$)*
UNDP Project ID:	00089331	GEF financing:	990,000	990,000
Country:	Belize	IA/EA own:		
Region:	LAC	Government:		
Focal Area:	CHEMICALS	Other:	25,000	30,442.21
FA Objectives, (OP/SP):		Total co-financing:	25,000	30,442.21
Executing Agency:	**Department of the Environment**	Total Project Cost:	1,015,000	1,020,442.21
Other Partners involved:		ProDoc Signature (date project began):		07/22/2014
		(Operational) Closing Date:	Proposed: 06/31/2017	Actual: 12/31/2018

OBJECTIVE AND SCOPE

The project was designed to: to assist the country in implementing its relevant obligations under the Stockholm Convention, in particular to reduce the releases of Unintentional POPs emissions, as well as to build country's capacity to manage chemicals and waste, in line with the GEF objectives. This will be accomplished through 2 principal project components.
Component 1: Regulatory Strengthening and Environmentally sound management of chemicals and waste, including POPs

Component 2: UPOPs release reduction in waste management operations and agriculture

The TE will be conducted according to the guidance, rules and procedures established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF Financed Projects.
The objectives of the evaluation are to assess the achievement of project results, and to draw lessons that can both

improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming.

EVALUATION APPROACH AND METHOD

An overall approach and method[2] for conducting project terminal evaluations of UNDP supported GEF financed projects has developed over time. The evaluator is expected to frame the evaluation effort using the criteria of **relevance, effectiveness, efficiency, sustainability, and impact,** as defined and explained in the UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects. A set of questions covering each of these criteria have been drafted and are included with this TOR (*Annex C*) The evaluator is expected to amend, complete and submit this matrix as part of an evaluation inception report, and shall include it as an annex to the final report.

The evaluation must provide evidence-based information that is credible, reliable and useful. The evaluator is expected to follow a participatory and consultative approach ensuring close engagement with government counterparts, in particular the GEF operational focal point, UNDP Country Office, project team, UNDP GEF Technical Adviser based in the region and key stakeholders. The evaluator is expected to conduct a field mission to **Belize,** including the following project sites

- ***SIRDI***
- ***Burrell Boom Transfer Station***
- ***Mile 24 Landfill***

Interviews will be held with the following organizations and individuals at a minimum:

(list key stakeholders).

Stakeholder List		
	Contact Person	**Email**
Department of the Environment		
	Martin Alegria	doe.ceo@environment.gov.bz
	Jorge Franco	projects@environment.gov.bz
GEF Operational Focal Point/ Chief Executive Officer		
Ministry of Agriculture, Fisheries, Forestry, the Environment and Sustainable Development	Dr. Percival Cho	ceo@environment.gov.bz
Project Board Members		
United Nations Development Programme	Diane Wade-Moore	diane.wade@undp.org
Belize Customs and Excise Department	Lorin Frazer	lorin.frazer@yahoo.com
Fabrigas	Glenford H Baptist	gbaptist@fabrigas.bz
Ministry of Health	John Bodden	jbodden@health.gov.bz

2 For additional information on methods, see the Handbook on Planning, Monitoring and Evaluating for Development Results, Chapter 7, pg. 163

Belize Natural Energy	Albert Roches	aroches@bne.bz
Pesticides Control of Belize	Miriam Serrut	miriam.oserrut@pcbbelize.com
Solid Waste Management Authority	Emmerson Garcia	emmersongarcia_15@yahoo.com or swtech@solidwaste.gov.bz
University of Belize	Juliane Pasos	jpasos@ub.edu.bz
Ministry of Economic Development	Kimberley Westby	Kimberley.Westby@med.gov.bz
Belize Agricultural Health Authority (BAHA)	Kenrick Witty	kenrick.witty@baha.org.bz
Sugar Industry Research Institute (SIRDI)	Marcos Osorio	marcos.sirdi@gmail.com
Technical Working Group Expert	Erasmo Franklin	ejfranko@gmail.com
	Mario Fernandez	marfer1605@yahoo.com

The evaluator will review all relevant sources of information, such as the project document, project reports – including Annual APR/PIR, project budget revisions, midterm review, progress reports, GEF focal area tracking tools, project files, national strategic and legal documents, and any other materials that the evaluator considers useful for this evidence-based assessment. A list of documents that the project team will provide to the evaluator for review is included in Annex B of this Terms of Reference.

EVALUATION CRITERIA & RATINGS

An assessment of project performance will be carried out, based against expectations set out in the Project Logical Framework/Results Framework (see Annex A), which provides performance and impact indicators for project implementation along with their corresponding means of verification. The evaluation will at a minimum cover the criteria of: **relevance, effectiveness, efficiency, sustainability and impact.** Ratings must be provided on the following performance criteria. The completed table must be included in the evaluation executive summary. The obligatory rating scales are included in Annex D.

Evaluation Ratings:			
1. Monitoring and Evaluation	***rating***	**2. IA& EA Execution**	***rating***
M&E design at entry		Quality of UNDP Implementation	
M&E Plan Implementation		Quality of Execution - Executing Agency	
Overall quality of M&E		Overall quality of Implementation / Execution	
3. Assessment of Outcomes	**rating**	**4. Sustainability**	**rating**
Relevance		Financial resources:	
Effectiveness		Socio-political:	
Efficiency		Institutional framework and governance:	
Overall Project Outcome Rating		Environmental :	
		Overall likelihood of sustainability:	

PROJECT FINANCE / COFINANCE

The Evaluation will assess the key financial aspects of the project, including the extent of co-financing planned and

realized. Project cost and funding data will be required, including annual expenditures. Variances between planned and actual expenditures will need to be assessed and explained. Results from recent financial audits, as available, should be taken into consideration. The evaluator(s) will receive assistance from the Country Office (CO) and Project Team to obtain financial data to complete the co-financing table below, which will be included in the terminal evaluation report.

Co-financing (type/source)	UNDP own financing (mill. US$)		Government (mill. US$)		Partner Agency (mill. US$)		Total (mill. US$)	
	Planned	Actual	Planned	Actual	Planned	Actual	Actual	Actual
Grants								
Loans/Concessions								
• In-kind support								
• Other								
Totals								

MAINSTREAMING

UNDP supported GEF financed projects are key components in UNDP country programming, as well as regional and global programmes. The evaluation will assess the extent to which the project was successfully mainstreamed with other UNDP priorities, including poverty alleviation, improved governance, the prevention and recovery from natural disasters, and gender.

IMPACT

The evaluators will assess the extent to which the project is achieving impacts or progressing towards the achievement of impacts. Key findings that should be brought out in the evaluations include whether the project has demonstrated: a) verifiable improvements in ecological status, b) verifiable reductions in stress on ecological systems, and/or c) demonstrated progress towards these impact achievements.3

CONCLUSIONS, RECOMMENDATIONS & LESSONS

The evaluation report must include a chapter providing a set of **conclusions**, **recommendations** and **lessons**.

IMPLEMENTATION ARRANGEMENTS

The principal responsibility for managing this evaluation resides with the UNDP CO in ***Belize*** . The UNDP CO will contract the evaluators and ensure the timely provision of per diems and travel arrangements within the country for the evaluation team. The Project Team will be responsible for liaising with the Evaluators team to set up stakeholder interviews, arrange field visits, coordinate with the Government etc.

EVALUATION TIMEFRAME

The total duration of the evaluation will be ***20*** days according to the following plan:

Activity	Timing	Completion Date
Preparation	*3* days	***October 5th 2018***
Evaluation Mission	*9* days	***October 22nd to October 31st 2018***
Draft Evaluation Report	*6* days	***November 16th 2018***

3 A useful tool for gauging progress to impact is the Review of Outcomes to Impacts (ROtI) method developed by the GEF Evaluation Office: ROTI Handbook 2009

Final Report	*2* days	***November 30th 2018***

EVALUATION DELIVERABLES

The evaluation team is expected to deliver the following:

Deliverable	Content	Timing	Responsibilities
Inception Report	Evaluator provides clarifications on timing and method	No later than 2 weeks before the evaluation mission.	Evaluator submits to UNDP CO
Presentation	Initial Findings	End of evaluation mission	To project management, UNDP CO
Draft Final Report	Full report, (per annexed template) with annexes	Within 3 weeks of the evaluation mission	Sent to CO, reviewed by RTA, PCU, GEF OFPs
Final Report*	Revised report	Within 1 week of receiving UNDP comments on draft	Sent to CO for uploading to UNDP ERC.

*When submitting the final evaluation report, the evaluator is required also to provide an 'audit trail', detailing how all received comments have (and have not) been addressed in the final evaluation report.

TEAM COMPOSITION

The evaluation team will be composed of *(1 international evaluator).* The consultants shall have prior experience in evaluating similar projects. Experience with GEF financed projects is an advantage. The evaluator selected should not have participated in the project preparation and/or implementation and should not have conflict of interest with project related activities.

The Team members must present the following qualifications:

- Minimum *5* years of relevant professional experience
- Knowledge of UNDP and GEF
- Previous experience with results-based monitoring and evaluation methodologies;
- Technical knowledge in the targeted focal area(s)

EVALUATOR ETHICS

Evaluation consultants will be held to the highest ethical standards and are required to sign a Code of Conduct (Annex E) upon acceptance of the assignment. UNDP evaluations are conducted in accordance with the principles outlined in the UNEG 'Ethical Guidelines for Evaluations'

PAYMENT MODALITIES AND SPECIFICATIONS

%	Milestone
10%	Upon acceptance and approval of the Inception Report
40%	Following submission and approval of the 1ST draft terminal evaluation report
50%	Following submission and approval (UNDP-CO and UNDP RTA) of the final terminal evaluation report

APPLICATION PROCESS

Applicants are requested to apply by **October 12, 2018.** Individual consultants are invited to submit applications together with their CV for these positions. The application should contain a current and complete C.V. in English

with indication of the e-mail and phone contact. Shortlisted candidates will be requested to submit a price offer indicating the total cost of the assignment (including daily fee, per diem and travel costs).

UNDP applies a fair and transparent selection process that will take into account the competencies/skills of the applicants as well as their financial proposals. Qualified women and members of social minorities are encouraged to apply.

Proposals are required to submit by email or in 1 sealed envelope clearly labelled RFP: **Final Terminal Evaluation-Belize Chemical and Waste Management Project**

United Nations Development Programme

Attn: Procurement Associate

3rd Floor, Lawrence Nicholas Building. Belmopan

Cayo District, Belize, C.A.

Tel: (501) 822-2688, 0467, 4228

Email: procurement.bz@undp.org

ANNEX A: PROJECT LOGICAL FRAMEWORK

Project Results Framework

This project will contribute to achieving the following Country Programme Outcome as defined in CPAP or CPD: UNDP Country Programme 2013-2017 Outcome 6: Public policies and institutional capacities are strengthened and capacitated to manage Belize's natural resource base in a sustainable manner, and for a more effective and multi-sectoral preparedness and response to natural disasters and climate-induced events.						
Country Programme Outcome Indicators: 1. National compliance with multi-lateral environmental agreements strengthened. 2. Strengthened policy framework and institutional arrangements for integrated water and land resource management						
Primary applicable Key Environment and Sustainable Development Key Result Area (same as that on the cover page, circle one):						
Applicable GEF Strategic Objective and Program: GEF-5 Chemicals Strategy: Objective 1: Phase out POPs and Reduce POPs Releases.						
Applicable GEF Expected Outcomes: Outcome 1.3 POPs releases to the environment reduced. Outcome 1.4POPs waste prevented, managed, and disposed of, and POPs contaminated sites managed in an environmentally sound manner. Outcome 1.5 Country capacity built to effectively phase out and reduce releases of POPs.						
Applicable GEF Outcome Indicators: Indicator 1.3.1 Amount of un-intentionally produced POPs releases avoided or reduced from industrial and nonindustrial sectors; measured in grams TEQ against baseline as recorded through the POPs tracking tool. Indicator 1.4.1 Amount of PCBs and PCB-related wastes disposed of, or decontaminated; measured in tons as recorded in the POPs tracking tool. Indicator 1.4.2 Amount of obsolete pesticides, including POPs, disposed of in an environmentally sound manner; measured in tons. Indicator 1.5.1 Progress in developing and implementing a legislative and regulatory framework for environmentally sound management of POPs, and for the sound management of chemicals in general, as recorded in the POPs tracking tool.						
	Indicator	**Baseline**	**Targets**		**Sources of verification**	**Risks and assumptions**
			Mid-term	**End of project**		
Project Objective: To protect human health and the environment locally and globally by reducing releases harmful POPs substances and increasing the capacity for hazardous chemicals and waste management.						

Outcome 1.1: ***Institutional capacities strengthened through enhanced policies and regulatory framework supporting sound management of chemical life cycle***	Chemicals Bill legally in force. Number of official meetings of National Integrated Management Authority. Target: 3	Draft National Integrated Chemicals Management Bill developed.	Chemicals Bill legally adopted. National Integrated Chemicals Management Authority Secretariat operational	Coherent legal and Institutional framework for the sound management of chemicals in Belize agreed.	Official Gazette. Meeting records of the National Integrated Chemicals Management Authority.	Risk: Delay in adoption as overlapping mandates of ministries not resolved Assumption: Project's multi-stakeholder coordination and frequent meetings will ensure coordination and agreement between the ministries.
	Number of base regulations and POPs specific guidelines adopted.	No specific chemicals and waste regulations or drafts exist.	Draft Industrial and Consumer Chemicals regulations and PCBs specific guidelines adopted.	Target: 5, POPs waste, UPOPs, pharmaceuticals, cosmetics and precursor chemicals regulations and guidelines adopted	Official Gazette. Publications of Ministries of Health and Environment	Assumption. Chemicals Bill adopted
	Number of inspections undertaken to enforce chemicals/POPs regulations. Training days of inspectors and	No specific Chemicals Bill inspections. Chemicals inspected as a part of inspections of industrial installations	10 chemicals emphasizing industrial inspections a year.	30 chemicals emphasizing industrial inspections a year. Target: 100 training man days in chemicals and POPs regulation	Work records, attendance sheets and reports from Department of Environment	Assumption: Regional Caribbean POPs management project will provide additional capacity building and inspector

	authorities for enforcement of chemicals bill.			enforcement and inspections.		training.
Outcome 1.2: Management and disposal of existing POPs waste .	Successful export disposal of existing POPs waste.	21 DDT and associated waste packed for disposal at KWCH hospital. 7 tons of PCB contaminated waste in barrels at private entity.	Capacity building undertaken, and disposal contract awarded.	Safe disposal of all POPs in Belize undertaken	Project documentation. Disposal Certificate	Risks: Delays caused by difficulties in finding a shipping line for transport.
Outcome 2.1: ***Measurable reduction in dioxin release from formal and informal waste dumps***	Tonnage of waste being uncontrollably burned at waste sites in the Western Corridor	20,000 tons of waste burnt at waste dumps and households both urban and peri-urban 6 g I-TEQ PCDD/Fs	Less than 10,000 tons burnt < 3 g I-TEQ PCDD/Fs	Less than 2,000 tons burnt < 0.6 I-TEQ PCDD/Fs	Transfer station and final landfill weighted data. Monitoring and evaluation estimates	
	Number of waste dumps closed and transfer centers built and operational	3 dumps closed, and transfer station construction commenced	4 dumps closed and transfer operational; 3 Mile, San Ignacio, San Pedro, Caye Caulker	6 dumps closed and transfer operational; 3 Mile, San Ignacio, San Pedro, Caye Caulker, Belmopan, Boom	Solid Waste Management authority documentation. Visual verification of construction and operation.	Assumption: Full government funding allocation assumed and critical.

Outcome 2.2: ***Reduction of UPOPs releases from uncontrolled, open burning of agricultural and other wastes***	Sugar Cane area under Green Harvesting (non-burning) among small holding farmers	0 acres	400 acres	6,000 acres	Sugar Cane Producer association reports SIDRI documentation	Assumption: Replication of project demonstration successful.
	Tonnage of sugarcane Green Harvested (non-burning)	80,000 tons (BSI) Releases 5.0 g I-TEQ PCDD/Fs	100,000 tons Releases 4,9 g I-TEQ PCDD/Fs	300,000 tons Releases 4,0 g I-TEQ PCDD/Fs	Sugar Cane Producer association reports SIDRI documentation	Assumption: increase from small scale farmers.
	Price of Green Harvested sugarcane	Green Harvested cane does not fetch a higher price.	Proposals for including the green harvesting as requirement for premium price schemes developed	Green harvesting included as requirement for premium price schemes Price premium for green harvested cane > 10 $ per ton.	Premium price schemes (Fairtrade) production standards. Sugar industry data for purchase price at gate.	Assumption: Premium price schemes, weights environmental over employment benefits in setting standards.

Outcome 3: Monitoring, learning, adaptive feedback, outreach, and evaluation.	M&E and adaptive management applied to project in response to needs, mid-term evaluation findings with lessons learned extracted.	No Monitoring and Evaluation system, nor evaluation of project output and outcomes.	Monitoring and Evaluation system developed during first year. Mid-term evaluation of project output and outcomes conducted with lessons learnt.	Final evaluation carried out.	Inception workshop report. APR/PIR. Independent mid-term evaluation report. Final evaluation report.	None.

ANNEX B: LIST OF DOCUMENTS TO BE REVIEWED BY THE EVALUATORS

1. **Audit Reports**
2. **Inventory and Assets**
3. **PEG Meeting Records**
4. **Stage Plans / End of Stage Reports and Highlight Reports**
5. **Project Implementation Review Reports (PIRs)**
6. **Key Project Deliverables**
7. **Project Log frame**
8. **Pesticides Control Board Strategy developed by IICA**
9. **Chemicals Strategy, Action Plan and Disposal**

ANNEX C: EVALUATION QUESTION MATRIX

The following table notes responses that provide information on the success of the project in meeting the Objective and Outputs of the Belize Chemicals and Solid Waste Management Project. The template is take from the Terms of Reference of the Project.

Evaluative Criteria Questions	Indicators	Sources	Methodology
Relevance: How does the project relate to the main objectives of the GEF focal area, and to the environment and development priorities at the local, regional and national levels?			
• The project relates directly to the GEF focal areas regarding (a) the destruction of POPs and other dangerous chemicals and (b) the safeguarding of the environment through management of wastes	• Destruction of POPs and other hazardous wastes • Construction of transfer stations and a landfill to manage municipal solid wastes	• Project documents verifying that destruction has occurred • Verification of construction	Project document review
• The project also meets the objective of GEF in implementation of national and regional plans for continuing management of chemicals and solid wastes	• Generation and legislative approval of a National Strategic Chemicals Plan	• Progress reporting of the status of the chemicals draft plan	Project document review
Effectiveness: To what extent have the expected outcomes and objectives of the project been achieved?			
• POPs chemicals destruction has been achieved	• Documentation of destruction	• Project documents	• Project document review
• Solid waste facilities constructed and operating	• Physical structures in operation	• Project documents	• Site visit
• Increased capacity for chemicals and waste management	• On the job experience and training	• Project documents, physical experience • Stakeholder input	• Project document review; site visits, interviews
Efficiency: Was the project implemented efficiently, in-line with international and national norms and standards?			
• POPs destruction process carried out in line with international and national norms and standards	• Project documentation, qualifications of subcontractor, disposal firm	• Project documents, prior experience in field	• Project documents
• Solid waste facilities constructed to international norms	• Project documents, physical inspection	• Project documents, interviews with waste facility staff	• Field visit, interviews

•	•	•	•
Sustainability: To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining long-term project results?			
• Financial support for destruction of unknown existing POPs not in place, institutional, socioeconomic, and environmental support is known to be behind sustaining results	• Unknown at this time, presence of unknown existing POPs not known	• Project documents	• Continued surveillance
• Solid waste program is designed to be self-supporting, any future expansion would be designed to also be self-supporting	• Continuing operation of the solid waste facilities	• Project documents, interviews with solid waste staff	• Field visit, project documents
• Increased capacity for chemicals and waste management	• Continuing participation of stakeholders	• Stakeholder Interviews	• Stakeholder interviews
Impact: Are there indications that the project has contributed to, or enabled progress toward, reduced environmental stress and/or improved ecological status?			
• Yes, construction of solid waste facilities and destruction of POPs	• Reduction of uncontrolled waste	• Stakeholder interviews	• Stakeholder interviews
• Yes, stakeholder enthusiasm and continued inputs	• Stakeholder interest in continuing and expanding participation in future phases	• Stakeholder interviews	• Stakeholder interviews

ANNEX D: RATING SCALES

Ratings for Outcomes, Effectiveness, Efficiency, M&E, I&E Execution	***Sustainability ratings:***	***Relevance ratings***
6: Highly Satisfactory (HS): no shortcomings 5: Satisfactory (S): minor shortcomings 4: Moderately Satisfactory (MS) 3. Moderately Unsatisfactory (MU): significant shortcomings 2. Unsatisfactory (U): major problems 1. Highly Unsatisfactory (HU): severe problems	4. Likely (L): negligible risks to sustainability 3. Moderately Likely (ML):moderate risks 2. Moderately Unlikely (MU): significant risks 1. Unlikely (U): severe risks	2. Relevant (R) 1.. Not relevant (NR) ***Impact Ratings:*** 3. Significant (S) 2. Minimal (M) 1. Negligible (N)
Additional ratings where relevant: Not Applicable (N/A) Unable to Assess (U/A		

ANNEX E: EVALUATION CONSULTANT CODE OF CONDUCT AND AGREEMENT FORM

Evaluators:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact during the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

ANNEX F: EVALUATION REPORT OUTLINE[4]

i. Opening page:

- Title of UNDP supported GEF financed project
- UNDP and GEF project ID#s.
- Evaluation time frame and date of evaluation report
- Region and countries included in the project
- GEF Operational Program/Strategic Program
- Implementing Partner and other project partners
- Evaluation team members
- Acknowledgements

4The Report length should not exceed *40* pages in total (not including annexes).

ii. Executive Summary

- Project Summary Table
- Project Description (brief)
- Evaluation Rating Table
- Summary of conclusions, recommendations and lessons

iii. Acronyms and Abbreviations
(See: UNDP Editorial Manual[5])

1. Introduction

- Purpose of the evaluation
- Scope & Methodology
- Structure of the evaluation report

2. Project description and development context

- Project start and duration
- Problems that the project sought to address
- Immediate and development objectives of the project
- Baseline Indicators established
- Main stakeholders
- Expected Results

3. Findings
(In addition to a descriptive assessment, all criteria marked with (*) must be rated[6])

3.1 Project Design / Formulation

- Analysis of LFA/Results Framework (Project logic /strategy; Indicators)
- Assumptions and Risks
- Lessons from other relevant projects (e.g., same focal area) incorporated into project design
- Planned stakeholder participation
- Replication approach
- UNDP comparative advantage
- Linkages between project and other interventions within the sector
- Management arrangements

3.2 Project Implementation

- Adaptive management (changes to the project design and project outputs during implementation)
- Partnership arrangements (with relevant stakeholders involved in the country/region)
- Feedback from M&E activities used for adaptive management
- Project Finance:
- Monitoring and evaluation: design at entry and implementation (*)
- UNDP and Implementing Partner implementation / execution (*) coordination, and operational issues

3.3 Project Results

- Overall results (attainment of objectives) (*)
- Relevance(*)
- Effectiveness & Efficiency (*)
- Country ownership
- Mainstreaming
- Sustainability (*)
- Impact

4. Conclusions, Recommendations & Lessons

5 UNDP Style Manual, Office of Communications, Partnerships Bureau, updated November 2008
6 Using a six-point rating scale: 6: Highly Satisfactory, 5: Satisfactory, 4: Marginally Satisfactory, 3: Marginally Unsatisfactory, 2: Unsatisfactory and 1: Highly Unsatisfactory, see section 3.5, page 37 for ratings explanations.

- Corrective actions for the design, implementation, monitoring and evaluation of the project
- Actions to follow up or reinforce initial benefits from the project
- Proposals for future directions underlining main objectives
- Best and worst practices in addressing issues relating to relevance, performance and success

5. Annexes

- ToR
- Itinerary
- List of persons interviewed
- Summary of field visits
- List of documents reviewed
- Evaluation Question Matrix
- Questionnaire used and summary of results
- Evaluation Consultant Agreement Form

ANNEX G: EVALUATION REPORT CLEARANCE FORM

(to be completed by CO and UNDP GEF Technical Adviser based in the region and included in the final document)

Evaluation Report Reviewed and Cleared by
UNDP Country Office
Name: _____
Signature: _____ Date: _____

UNDP GEF RTA
Name: _____
Signature: _____ Date: _____

Annex B : Mission Itinerary

The mission itinerary encompassed the week of February 4th through February 9th, 2019.

Itinerary:

3 February 2019:	Arrive in Belmopan, Belize
4 February 2019:	Meeting with UNDP Belize at their Belmopan Offices
	Meeting with Jorge Franco, Department of Environment
	Meeting with Dr. Percival Cho, Department of Environment
	Meeting with John Bodden, Ministry of Health Authority
5 February 2019:	Meeting with Lorin Frazer, Belize Customs and Excise Department
	Meeting with Glenford Baptist, Fabrigas
	Field Visit to the Boom Transfer Station
6 February 2019	Meeteng with Miriam Serrut, Pesticide Control Board
	Meeting with Albert Roches, Belize Natural Energy
	Meeting with Juliane Pasos, University of Belize
7 February 2019	Field Visit to Sugar Industry Research Institute
	Interview with Marcos Osorio, SIRI
8 February 2019	Project De-briefing with Diane Wade Moore and Edgar Ek
9 February 2019	Depart Belmopan, Belize

ANNEX C : Persons Interviewed

The following persons were interviewed during the course of the Terminal Evaluation:

Annex 8: List of People Interviewed

#	Name	Position	Organization
Mrs.	Diane Wade Moore	Programme Analyst	UNDP
Mr.	Jorge Franco	Project Officer	Department of the Environment
Dr.	Percival Cho	Chief Executive Officer	Ministry of Agriculture Forestry, Fisheries, the Environment and Sustainable Development
Mr.	Edgar Ek	Deputy Chief Environmental Officer	Department of Environment
Ms.	Lumen Cayetano	Officer	Solid Waste Management Authority(SWMA)
Ms.	Ismirla Andrade	Programme Associate	UNDP
Mr.	Glenford Baptist		FABRIGAS
Mr.	Lorin Frazer	Customs Officer	Belize Customs and Excise Department
Ms.	Miriam Serrut	Resgistrar	Pestcides Control Board
Mr.	Albert Roches	Environmental Officer	Belize Natural Energy
Mrs.	Julianne Pasos	Dean	University of Belize
Mr.	Jeffrey Joseph	Officer	SIRDI
Mr.	Marcos Osorio	Executive Director	MinistSIRDOry of Economic Development, Petroleum, Investment, Trade and Commerce
Mr.	John Bodden	Principal Public Health Inspector	Ministtry of Health

Met 14 people (5 women and 9 men)

ANNEX D : Summary of Field Visits

In the course of the mission to Belize, two field visits were implemented, to view the results of several of the initiatives funded by the Solid Waste and Chemicals Management Project. These field visits are briefly summarized as follows:

Field Visit to the Burrell Boom Solid Waste Transfer Station

On February 5th, 2019, Mr. Ewoldsen and the UNDP driver visited the Burrell Boom Waste Transfer Station, in the general vicinity of Hattieville. The visit had as its intent the following, with the requisite actions noted:

- To determine if the Burrell Boom facility had been designed and constructed using standard similar to those used by established waste management programs in Europe, Canada, and the United States.

  The Burrell Boom facility has been designed and constructed using standards acceptable for waste management facilities in developed countries
- To determine if the operation of the Burrell Boom facility was being operated in a safe and efficient manner, with appropriate health and safety procedures consistent with those used in Europe, Canada and the United States

  The Burrell Boom facility is operated in a safe and efficient manner, with health and safety procedures being followed by the staff that are consistent with those of developed countries
- To determine to what extent the solid waste delivered to the facility was sorted, and if any of the sorted material was recycled

  A limited amount of hand sorting of the waste is carried out by approved contractors, who recycle and sell the waste into available economic markets
- To ascertain whether the previous uncontrolled solid waste site, immediately to the north of the Burrell Boom facility, was appropriately closed and the groundwater quality monitored.

  The previous uncontrolled site has been capped with a clay cover, and several groundwater monitoring wells installed in and around the old site.

Field Visit to the Sugar Industry Research Institute

On February 7th, 2019, Mr. Ewoldsen visited the Sugar Industry Research Institute at Buena Vista Village, Corozal District, several hours drive north of Belmopan. The visit had as its intent the following, with the observations noted:

- To understand the mission of SIRI, to tour their facility, and to visit the pilot sites that they are operating in the vicinity of Buena Vista, in co-operation with the sugar farmers that own the pilot sites.

The SIRI facility has an operational research facility, working co-operatively with the local farmers through and "extension service" and an internet / cell phone-based information system. It also has owned equipment that is made available to farmers who want to try mechanical harvesting and fertilization / biocide applications

- To view sugar cane areas that have been harvested under the "old system" of pre-cut burning, manual cutting of the sugar cane, and then a second burning to dispose of the harvest wastes

  Numerous locations were observed that had been harvested under the manual harvesting techniques. These confirmed that the burning process resulted in high smoke / particulate emissions, resulted in minimal residuals that could be used as a mulch, and required hand or mechanical fertilization / pesticide application
- To view a pilot sugar cane area that has been mechanically harvested, with no burning before or after the harvest

  The pilot area was viewed, and the efficacy of the mechanical harvesting confirmed. Harvest waste was mounded in a row between planted sugar cane stalks, to serve as a moisture sink and mulch.
- To view the pilot sugar cane area that has been mechanically fertilized and treated with an herbicide / pesticide at the end of the harvest

  The pilot sugar cane area had been treated with fertilizer and herbicide / biocide, applied at a depth of 6 to 8 inches, through a mechanical applicator

The field visits were very informative and beneficial to the efforts of the Terminal Review consultant. Similar visits should be conducted in any further Mid-Term and Final Evaluations of other waste or agricultural projects.

ANNEX E : List of Documents Reviewed

The following documents were reviewed during the Terminal Evaluation

- UNDP Belize: "Belize Chemical and Waste Management Project", 2014" (Project Document)
- UNDP Belize: "National Chemical Profile for Chemicals Management, Belize" 2015
- UNDP / GEF: "Guidance for Conducting Terminal Evaluations of UNDP Supported GEF Projects"
- UNEG "Guidance in Integrating Human Rights and Gender Equality in Evaluations"
- Belize Department of Environment: "Belize Hazardous Waste Regulations", 2009
- Quarterly End of Stage Reports, Belize Chemicals and Waste Management Project; Years 2016 to Q2 2017 Belize Department of Environment
- Quarterly Stage Plan Reports, Belize Chemicals and Waste Management Project; Years 2016 to Q1 2017 Belize Department of Environment
- Belize Pesticides Control Board; Strategic Overview 2017 – 2021 (brochure)
- UNDP Belize; Yearly Financial Reports; 2015 – 2018,
- UNDP Belize; Annual Combined Delivery Reports, 2015 – 2018
- Belize Department of Environment; Lessons Learned Report, Chemicals and Waste Management Project, Ms. Gisel Correa-Cobb, October 2017

ANNEX F : Evaluation Question Matrix

The following table notes responses that provide information on the success of the project in meeting the Objective and Outputs of the Belize Chemicals and Solid Waste Management Project. The template is taken from the Terms of Reference of the Project.

Evaluative Criteria Questions	Indicators	Sources	Methodology
Relevance: How does the project relate to the main objectives of the GEF focal area, and to the environment and development priorities at the local, regional and national levels?			
• The project relates directly to the GEF focal areas regarding (a) the destruction of POPs and other dangerous chemicals and (b) the safeguarding of the environment through management of wastes	• Destruction of POPs and other hazardous wastes • Construction of transfer stations and a landfill to manage municipal solid wastes	• Project documents verifying that destruction has occurred • Verification of construction	Project document review
• The project also meets the objective of GEF in implementation of national and regional plans for continuing management of chemicals and solid wastes	• Generation and legislative approval of a National Strategic Chemicals Plan	• Progress reporting of the status of the chemicals draft plan	Project document review
Effectiveness: To what extent have the expected outcomes and objectives of the project been achieved?			
• POPs chemicals destruction has been achieved	• Documentation of destruction	• Project documents	• Project document review
• Solid waste facilities constructed and operating	• Physical structures in operation	• Project documents	• Site visit
• Increased capacity for chemicals and waste management	• On the job experience and training	• Project documents, physical experience • Stakeholder input	• Project document review; site visits, interviews
Efficiency: Was the project implemented efficiently, in-line with international and national norms and standards?			
• POPs destruction process carried out in line with international and national norms and standards	• Project documentation, qualifications of subcontractor, disposal firm	• Project documents, prior experience in field	• Project documents
• Solid waste facilities constructed to international norms	• Project documents, physical inspection	• Project documents, interviews with waste facility staff	• Field visit, interviews
•	•	•	•

Sustainability: To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining long-term project results?			
• Financial support for destruction of unknown existing POPs not in place, institutional, socioeconomic, and environmental support is known to be behind sustaining results	• Unknown at this time, presence of unknown existing POPs not known	• Project documents	• Continued surveillance
• Solid waste program is designed to be self-supporting, any future expansion would be designed to also be self-supporting	• Continuing operation of the solid waste facilities	• Project documents, interviews with solid waste staff	• Field visit, project documents
• Increased capacity for chemicals and waste management	• Continuing participation of stakeholders	• Stakeholder Interviews	• Stakeholder interviews
Impact: Are there indications that the project has contributed to, or enabled progress toward, reduced environmental stress and/or improved ecological status?			
• Yes, construction of solid waste facilities and destruction of POPs	• Reduction of uncontrolled waste	• Stakeholder interviews	• Stakeholder interviews
• Yes, stakeholder enthusiasm and continued inputs	• Stakeholder interest in continuing and expanding participation in future phases	• Stakeholder interviews	• Stakeholder interviews

ANNEX G : Questionnaire Used with Stakeholders

Questionnaire Proposed for Obtaining Information from Stakeholders
Specific Topics in Chemicals and Waste Management

The following questions will be directed towards stakeholders or project staff with direct knowledge of the area of the project being reviewed.

Component 1: Regulatory Strengthening and Environmentally sound management of chemicals and waste, including POPs

Were the policies and regulatory framework adopted modeled after those used by another developed or developing country, or generated internally by the government of Belize ?

Activity 1.1.1: Development of a coherent Legal and Institutional framework for the sound management of chemicals in Belize

Was the legal and institutional framework for sound management of chemicals in Belize developed using GEF or European Union guidelines, or generated internally by the government of Belize ?

Activity 1.1.2: Industrial chemicals regulation developed in order to develop and incorporate enabling control regulations for Polychlorinated Biphenyls (PCB) and their standard operating procedures in the legal framework.

Did the industrial chemicals regulations developed follow generally accepted international practice for the control and destruction of PCBs ?

Activity 1.1.3: National regulatory instruments on consumer chemicals, including pharmaceuticals, cosmetics and pre-cursor chemicals revised and updated to address POPs waste, UPOPs, mercury and other hazardous chemicals

Have the national regulatory instruments on consumer chemicals been revised to address POPs, UPOPS, mercury and hazardous chemicals ?

Activity 1.1.4. Regulations for rural solid waste stream management developed.

Have the regulations for rural solid waste stream management been put in place and are they being implemented and enforced ?

Activity 1.1.5. Chemicals regulation and solid waste management compliance promotion and enforcement rules legislated and capacities for enforcement enhanced

Has chemicals and solid waste management compliance promotion been legislated, publicized, enforced and capacities for this improved ?

Outcome 1.2: Management and disposal of existing POPs waste

Activity 1.2.1. Training in buyer's competence for disposal services for hazardous waste, including POPs as well as safe practices for handling, packing and transportation.

Has training been completed in disposal services of hazardous waste / POPs, have safe practices been established for handling, packing and transportation of POPs and waste ?

Activity 1.2.2. Repacking and disposal of obsolete PCB and DDT stockpiles as well as associated waste through export to a dedicated facility.

Has the repacking of obsolete PCB and DDT been completed, and has export of these chemicals to a destruction facility been arranged ?

Component 2: UPOPs release reduction in waste management operations and agriculture

Outcome 2.1: Measurable reduction in dioxin release from formal and informal waste dumps

Activity 1.2.2. Closure of dumpsites, construction of new facilities

Has the Belize City open dumpsite at Mile 3 / 3.5 been closed and cleaned up, and a transfer station constructed ?

Has the Regional Sanitary Landfill at Mile 24 been constructed, with all the ancillary facilities ?

What design standards were used to ensure isolation of wastes from the environment ?

Have the open dumpsites at the regional cities / towns been closed and cleaned up ?

Have transfer stations been constructed at regional cities / towns ?

Has staff development taken place, and local specialty consultancies identified ?

Activity 1.2.2. Waste separation procedures for planned new solid waste management facilities, the transfer station and regional landfill,

Have waste separation procedures been developed and are they being used

Outcome 2.2: Reduction of UPOPs releases from uncontrolled, open burning of agricultural and other wastes

To what extent have small scale cane growers adopted agricultural practices that avoid can burning

Has a pilot demonstration project of non-burning of cane been implemented or planned ?

Has technological assistance and expertise been made available to small cane cooperatives that will lead to Green Harvesting ?

Activity 2.2.1. Piloted alternatives to agricultural burning in sugar cane farming.

Are small scale mechanical harvesting approaches, including those from the LAC region, being studied or demonstrated to small scale framers, as well as improved pest management ?

Activity 2.2.2. Promotion of farmer voluntary programmes and guidelines regulating agricultural burning

Is there an initiative in place that will lead to the regulation of agricultural burning, Green Harvesting and preferential trading schemes ?

Component 3: Monitoring, learning, adaptive feedback, outreach, and evaluation

Has feedback been given to the Government capitalize on the project results ?

Have lessons learned and best practices been accumulated, summarized and replicated at the country level. ?

ANNEX H : Evaluation Consultant Agreement Form

Evaluators/Consultants:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study limitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

FTE Consultant Agreement Form

Agreement to abide by the Code of Conduct for Evaluation in the UN System:

Name of Consultant Hans M. Ewoldsen_____

Name of Consultancy Organization (where relevant):
N.A._____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at __*Palm Springs, California (Place)* on _*20 January2019 (Date)*

Signature:

ANNEX I : Evaluation Report Clearance Form

EVALUATION REPORT CLEARANCE FORM

Evaluation Report Reviewed and Cleared by

UNDP Country Office

Name: _____**Diane Wade Moore**_____

Signature: _____ Date: _____

UNDP RTA

Name: _____

Signature: _____ Date: _____