Report:

"Midterm Review (MTR) of the project 'Sound Chemicals Management Mainstreaming and UPOPs reduction in Kenya' (PIMS # 5361)'

Report

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Reviewer:

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Disclaimer

Please note that 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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LIST OF ACRONYMS

3Rs	Reduce, Reuse and Recycle
AAK	Agrochemicals Association of Kenya
APCS	Air Pollution Control System
APR	Annual Project Report
AWP	Annual Work Plan
BAT	Best Available Techniques
BEP	Best Environmental Practices
CTEA	Clean Tech East Africa
CTF	Central Treatment Facility
DOHSS	Department of Occupational Health and Safety Services
EAC	East African Community
EIA	Environmental Impact Assessment
EMCA	Environmental Management and Coordination Act
EOL	End of Life
ESM	Environmentally Sound Management
FSP	Full Size Project (GEF terminology)
GCD	Government Chemist Department
GDP	Gross Domestic Product
GEF	Global Environment Facility
GBM	Green Belt Movement
HCF	Healthcare Facilities
HCW	Healthcare Waste
HCWM	Healthcare Waste Management
ICT	Information and Communication Technologies
IMC	Inter-Ministerial Committee
IP	Implementing Partner
IR	Inception Report
I-RAT	Introduction – Rapid Assessment Tool
I-TEq	Internationally agreed Toxic Equivalent
IW	Inception Workshop
KAM	Kenya Association of Manufacturers
KDC	Kenya Disaster Concern (NGO)
KEBS	Kenya Bureau of Standards
KNCP	Kenya National Chemical Profile
LDPE	Low-density polyethylene
MENR	Ministry of Environment and Natural Resources now MEF (Ministry of Environment and Forestry)
MEAs	Multilateral Environmental Agreements
MOH	Ministry of Health
MoV	Means of Verification
NCMCO	National Chemical Management Coordination Office
NEMA	National Environment Management Authority of Kenya
NIP	National Implementation Plan (for Stockholm Convention on POPs)
NPD	National Project Director
PCPB	Pest Control Products Board
PCDD	Polychlorinated dibenzo-para-dioxins
PCDF	Polychlorinated dibenzofurans
PET	Polyethylene terephthalate
PF	Project Facility
PIF	Project Identification Form (GEF terminology)

PIR	Project Implementation Review (annual GEF requirement)
PPE	Personal protective equipment
PPP	Public Private Partnership
PRTR	Pollutant Release and Transfer Register
PM	Project Manager
PMU	Project Management Unit (PMU)
UON	University of Nairobi
UPOPs	Unintentionally produced Persistent Organic Pollutants
POPs	Persistent Organic Pollutants
RAT	Rapid Assessment Tool
SC	Stockholm Convention
SIP	SAICM Implementation Plan
SME	Small and Medium Enterprises
SRF	Strategic Results Framework
UNEP	United Nations Environment Program
UNDP	United Nations Development Program
UNDP-CO	United Nations Development Program Country Office
USD	United States Dollar
WARMA	Water Resource Management Authority
WHO	World Health Organization

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1. EXECUTIVE SUMMARY

Table 1: Project Information Table

Project Title:	**Sound Chemicals Management Mainstreaming and POPs reduction in Kenya**			
GEF Project ID:	5361		*Committed at endorsement (USD Million)*	*Realised co-financing / spent GEF budget at mid-term review (USD Millions)*
UNDP Project ID:	00099820	***GEF financing:***	4.515000	**1.800000**
Country:	Kenya	***IA/EA own:***		
Region:	Africa	***Government:***	8.580153	**7.670385**
Focal Area:	POPs	***Others (private):***	12.428650	**0.808479**
FA Objectives, (OP/SP):		***Total co-financing:***	21.008803	**8.478864**
Executing Agency:	UNDP under NIM Modality	***Total Project Cost:***	25.523803	**16.957728**
Other Partners involved:	Ministry of Environment and Natural Resources, Kenya (now Ministry of Environment and Forestry)	***GEF endorsement:***		ProDoc Signature: 21 July, 2016
		(Operational) Closing Date:		Expected closing May, 2021

1.1 Introduction and brief description of the project

Kenya is a party to the Stockholm Convention (SC) on Persistent Organic Pollutants (POPs), and is thus under obligations to meet the requirements of the SC. Kenya developed its National Implementation Plan (NIP) subsequent to signing of the SC. In addition to SC, the country has ratified a number of other chemicals related Multi-Lateral Environmental Agreements (MEAs). The updated NIP of Kenya for SC establishes the following priorities related to the sound management of chemicals:

- Promoting Technology Transfer, Cleaner Production, industry and civil society participation in POPs management
- Enhancing laboratory services, research for monitoring of POPs pollutants and assessment of alternatives to toxic POPs
- Promoting safer POPs alternatives as suggested by the National Implementation Plan (mostly concerning the use of non-POPs or non-chemical pesticides, alternatives to PBDE flame retardants and alternatives to these processes which are generating POPs).

However, in Kenya there are difficulties in the completion of the related activities with special reference to the establishment and enforcement of an integrated chemicals and waste regulation which takes into account: guidance on waste classification based on their chemical composition; standards on substances recovered from waste; sound management of chemical waste; etc. The GEF project, 'Sound Chemicals Management Mainstreaming and UPOPs reduction in Kenya' is the first post-NIP project which has been launched in Kenya to address the priorities identified in the NIP.

Based on the updated estimation provided in the Kenya NIP (2014) update, the disposal of medical waste generates yearly around 490.1 g TEQ/yr. of UPOPs. The NIP update also reports that HCW disposal equipment normally operate in a batch-type mode, and that only in a couple of cases, incinerators work more than eight hours per day for five days per week. Based on the NIP update, open burning of waste and landfills generates about 247 gTEq/year of UPOPs. Although, MSW burning is not the highest source of UPOP emissions, this form of releases is widespread and thus has the potential to affect far more people. The lack of controls in open air burning is a key concern.

The 'SAICM Implementation Plan for Kenya (2011-2014)', has the goal of reducing the identified risks to human health and the environment due to exposure to chemicals. Risks occur in agriculture, manufacturing and day-to-day life. The plan lists specific priority risks and hazardous activities. It provides a framework with themes and actions that Kenya needs to implement to address risks posed by chemicals. The plan proposes to strengthen national mechanisms such as policies, legislations, commissions, education programs, information networks, etc. to facilitate the implementation of specific chemicals management activities at the national, county and enterprise levels. The SAICM implementation plan recognizes that all interventions on chemicals production, import, export, use, transport and disposal are the priorities in Kenya. Kenya needs to make greater efforts to integrate fully the objectives of sound management of chemicals into national budgets and development cooperation.

The objective of the GEF funded project is the "Reduction of the release of UPOPs and other substances of concern and the related health risks, through the implementation of environmentally sound management of municipal and healthcare wastes and of an integrated institutional and regulatory framework covering management and reporting on POPs." The project intends to achieve this objective through improving the regulatory system, enhancing its enforcement, raising awareness on POPs, and by establishing the capacity for safe handling, transport and improved disposal of POPs-containing or POPs-generating waste. The action on the ground is largely restricted to the four large urban area of the country (Nairobi, Kisumu, Nakuru and Mombasa). The project will contribute to the reduction of risks for the human health and the environment by avoiding the release of POPs in the environment and preventing people's exposure to POPs. The project encompasses four components and a separate component for Monitoring and Evaluation as follows:

Component 1: Streamlining sound management of chemicals and waste into national and county development activities through capacity building of MENR, MOH, county governments of Nairobi, Kisumu, Nakuru and Mombasa and the NGOs.
Component 2: Introducing environmentally sound management of health care waste in selected healthcare facilities; policy and strategic plans to prepare them to adopt BAT and BEP disposal.
Component 3: Demonstration of sound healthcare waste disposal technologies in a selected number of healthcare facilities in each county.
Component 4: Minimizing releases of unintentionally produced POPs from open burning of waste.
Component 5: Monitoring, learning, adaptive feedback, outreach and evaluation.

Table 2 provides the Project Objectives along with the summary of different Outputs the planned outcomes of the project.

Table 2: Project Objectives, Outcomes and the outputs

Outcome	Output
Project Objective: Reduction of the releases of U-POPs and other substances of concern and of the related health risk through the implementation of ESM of municipal and healthcare waste and of an integrated institutional and regulatory framework covering management and reporting of POPs.	
Component 1	
Outcome 1.1: Policies, strategies regulatory and policy framework integrating the provisions of streamlining chemicals management into development activities (specifically those of the Stockholm convention and the SAICM recommendations) adopted and institutional capacity on U-POPs and waste management enhanced.	1.1.1: Overall policy framework and specific regulatory measures covering environmentally sound management of chemicals in general and POPs in particular through chemicals life cycle management developed and implemented.
	1.1.2: Key institutions have knowledge and skills to formulate and implement necessary chemicals and waste environmental policies, consistent with sound chemicals management principles and obligations under international agreements
	1.1.3: Key institutions have incorporated sound management of chemicals and wastes, including POPs, in their activities.
	1.1.4: National coordinating meetings on POPs held regularly (4 times per year) without GEF financial support

Outcome	Output
Outcome 1.2 Monitoring activities intensified and strengthened and PRTR database in place.	1.2.1: At least 70% of laboratory analyses in research and monitoring institutions required to monitor the implementation of national policy on hazardous chemicals and wastes being carried out on a cost recovery basis
	1.2.2: 70% of universities nationwide include issues of hazardous chemicals and wastes, risks and legislation, in their curriculum
	1.2.3: PRTR Database and reporting system in place.
Component 2	
Outcome 2.1 Personnel of hospital facilities and control authorities at central and county levels have enough capacity guidance and equipment to manage healthcare waste in an Environmental Sound Manner	2.1.1: Procedures and guidelines for the assessment and implementation of hazardous waste management at healthcare facilities built on lessons and examples from the application of the I- RAT tool under the GEF4 /UNDP Global projects and on the WHO bluebook "Safe Management of Wastes from Health- care Activities" developed and adopted
	2.1.2: A national healthcare waste handbook containing guidelines for HCWM drafted and adopted by the MOH, including introduction of non-mercury devices in the HCFs
Outcome 2.2 Implementation of BAT/BEP at selected hospital facilities successfully demonstrated and measured against the baseline	2.2.1: Hospital personnel at all levels trained on the implementation of the above procedures
	2.2.2: Baseline assessment of each healthcare facility based on the assessment procedures developed in 2.1.1 carried out, and waste management plans based on the baseline assessment level drafted and implemented
	2.2.3: ESM management of healthcare waste (based on WHO bluebook) implemented in 4 facilities in each county (12 facilities in total) including replacement of mercury devices with non-mercury
	2.2.4: Final assessment of the healthcare facility to measure results achieved with the implementation of the ESM against baseline is carried out and estimates amount of U- POP releases avoided.
Component 3	
Outcome 3.1. Feasibility analysis and procurement of ESM technologies for healthcare waste disposal completed	3.1.1: Feasibility study and terms of reference for non-combustion or low-U-POPs emission technologies for healthcare waste disposal in selected hospitals or waste management facilities drafted.
Outcome 3.2 BAT/BEP technologies for the disposal of healthcare waste successfully established and demonstrated, with a potential reduction of U-POPs emissions in the order of 19gTeq/year	3.2.1: Demonstration and performance assessment of the technologies in the selected facilities completed (at least 4 facilities or an overall amount of waste in the order of 630t/yr.)
	3.2.2: Waste disposal activities of hospital facilities/programs are documented and their performance is evaluated to exemplify best practices in health-care waste management.
	3.2.3: Useful replication toolkits on how to implement best practices and techniques are developed
Component 4	
Outcome 4.1. Awareness raising and capacity strengthening on ESM of solid waste ensured.	4.1.1: Awareness raising activities for the communities and the municipalities aimed at enhancing 3Rs of waste
	4.1.2: Regulatory framework for the recovery of waste materials (glass, organic, plastic) and for licensing of the recovery activity at county and central levels improved to integrate SC requirements
	4.1.3: Counties provided with training manuals, and technical assistance for the management of solid wastes.
Outcome 4.2 Sound Management of solid waste in targeted municipalities implemented with the support of NGOs, with a reduction of unintentionally produced POPs from the burning of	4.2.1: Communities selected for demonstrating plans of actions for the reduction of solid waste open burning by increasing 3Rs of waste.
	4.2.2: Initiatives for reducing, reuse and recycle of waste and for composting, collection of compostable municipal waste for communities in three counties of Nairobi, Mombasa and Nakuru implemented with a PPP approach and supervised with the support of NGOs.

Outcome	Output
solid waste of 23 g I-TEQ/year (20 % of the current estimate of 247 g I-TEQ/year). Emergency plan to reduce exposure of population to harmful substances implemented.	4.2.3: Local initiative for the re-use / recycling of other non- hazardous waste streams (i.e. plastics).
Outcome 4.3: Municipal waste disposal sites with adequate management practices (non-burn).	4.3.1: Prioritization of open-burning landfills to be closed and cleaned up, emergency plans including social and resettlement issues and cleanup plans for at least 3 landfills drafted.
	4.3.2: Emergency measures for reducing release of contaminants in the environment and the exposure of the population implemented in one high priority site.

1.2 MTR Ratings & Achievement Summary Table

Following Table provides a summary of the ratings for;

a) Progress towards results
b) Project Objectives
c) Implementation and Adaptive Management
d) Sustainability.

Table 3: Mid-term review ratings and achievements summary

Measure	MTR Rating[1]	Achievement Description
Project Strategy	NA	Kenya is progressively reaching a fairly stable economic situation and is proactively proceeding with addressing issues relating the emissions of POPs. In line with the priorities of the government, the present GEF project has following three parts; • Component 1: Implementation of the 'Sound Chemicals Management Program' in the country • Component 2 and 3: Reduction in the release of UPOPs due to burning of HCW • Component 4: Reduction in the release of UPOPs due to dumping of SW (which eventually gets burned at the dumpsite) For the 'Sound Management of Chemicals' part of the project, the strategy is centred around the effective ways towards implementation of the plans envisaged by the Stockholm National Implementation Plan (NIP) and the SAICM Implementation Plan (SIP). This part of the project is focused on the activities which have synergies with the other two components of the project (emission of UPOPs due to burning of HCW and emissions of UPOPs due to dumping of SW). Accordingly, the strategy for this part of the project comprises of the following • Increase awareness among the industry and civil society on cleaner production, and on alternatives to POPs • Increase in analytical services for priority chemicals especially under Stockholm, Rotterdam and Minamata Conventions and the establishment of more sustainable laboratory analysis services air, water and soil media • Improvement of regulatory texts and their enforcement towards the implementation of a sound management of chemicals.

[1] HS: Highly Satisfactory, S: Satisfactory, MS: Marginally Satisfactory, MU: Marginally Unsatisfactory, U: Unsatisfactory, HU: Highly Unsatisfactory, L: Likely, ML: Moderately Likely, MU: Moderately Unlikely, U: Unlikely, NR: Not Rated

Measure		MTR Rating[1]	Achievement Description
			For the Components of the project pertaining to addressing the emissions of UPOPs due to HCW management, the project strategy addresses the two key issues of 'poor segregation' and 'poor choice of technology for treatment and disposal of waste'. Thus, the strategy comprises of the following; • Building capacity at national, county and HCF level for the introduction of 'Best Available Technologies (BAT)' and 'Best Environmental Practices (BEP)' • Drafting and disseminating technical guidance on HCWM, officially endorsed by the government • Strengthening the legislative and policy framework governing HCWM and Mercury at national and county level • Improving HCWM awareness and education • Increase segregation and minimisation of waste. This is to be done mostly by establishing and enforcing HCW management units in the HCFs and providing on-site continuous training and technical assistance to the personnel of the HCFs. In addition, key waste management equipment (bags, bins, cart, sharp boxes) are to be provided to the project HCFs. • Improvement of HCW disposal technology and increased centralisation of waste disposal. For the Component of the project pertaining to the SW, the strategy is focused on the following: • Creation of alternative approaches to dispose different constituents of the 'Solid Waste' using 'integrated solid waste management'. • The strategy relies on the engagement of communities already involved in the informal management of solid waste. This includes waste separation and recycling; development of small businesses based on waste recycling and composting. This will be achieved by enhancing the "3R" economy and enabling municipalities to establish Public Private Partnerships (PPP) schemes with the support of NGOs that can at the same time reduce the waste flows being burnt, reduce poverty and provide an alternative opportunity for people living at the dumpsites. • Support to the development of a new stream of recycling for plastics • Development of emergency measures to avoid accidental or voluntary burning of wastes at the dumpsites • Active involvement of three sets of actors that are essential to build an alternative, sustainable scenario: the private sector, the CSOs and the counties.
Progress towards results	**Project Objectives**	**MS**	The stated objective of the project is "Reduction of the release of U-POPs and other substances of concern and the related health risks, through the implementation of environmentally sound management of municipal and healthcare wastes and of an integrated institutional and regulatory framework covering management of and reporting of POPs. "Accordingly, the project design has components / activities which are specific either to the 'Sound Management of Chemicals' or 'Reduction of UPOPs emissions due to HCW' or "Reduction if the UPOPs emissions due to SW' It is targeted that by the end of the project there would be increased

Measure		MTR Rating[1]	Achievement Description
			level of awareness/capacity, regulatory framework and laboratory services for 'sound management of chemicals'; reduction in the emissions of UPOPs due to HCW by 19 gTEq/ yr.; disposal of minimum 50% of the HCW in a ESM; reduction in the emission of 20.0 gTEq/ yr. due to emergency measures at dumpsites; reduction in the emission of UPOPs by 3.0 gTEq/ yr. due to 3R of collected (metals, plastics, glass, paper, organic matter) at the source of generation. The project is implementing (or has planned to implement) most of the activities/targets mentioned in the result frame-work of the project. In spite of this, due to a number of reasons, presently, the progress towards achievement of most of the above-mentioned expected results by the end of the project is likely (unless corrective actions are undertaken). For example; • The project design has not provided for any emergency measures for reduction of release of emissions of UPOPs at the dumpsites (please see recommendation 2). There is no action on this front by the project. Thus, with the present state of affairs, no achievement towards reduction in the release of UPOPs due to emergency measures is expected. • Considering the present scale of activities for collection of the waste at the source of generation and considering the fact that the inert part of the SW in the baseline case was not getting combusted at the dump sites, the targeted reduction of 3.0 gTEq/ yr. is not expected to be achieved, if corrective actions are not implemented (please see recommendation 3) • Although, the project is promoting the use of autoclaves and microwaves for treatment of HCW, the material after such treatment is getting finally disposed of at the dumpsites (where it eventually gets burned), thus, there is no reduction in the release of UPOPs (please see recommendation 5). It is expected that by the end of the project the regulatory framework for management of chemicals and UPOPs would be in place and there will be increased level of awareness/ capacity amongst the stakeholders for management of the chemicals. Considering this, the progress towards achievement of 'project objectives' has been rated as **Moderately Satisfactory**, even though significant shortfalls towards achievement of reduction in the release of UPOPs is expected.
	- Outcome 1.1	**MS**	Component 1 of the project pertains to capacity building of relevant ministries at the central level and the county governments where the pilot activities under the project are being carried out (Nairobi, Kisumu, Nakuru and Mombasa) and the NGOs/ CBOs. Under Outcome 1.1 of the Component 1, Policies, strategies regulatory and policy framework are to be integrated with provisions of streamlining chemicals management into development activities, thereby enhancing the institutional capacity on UPOPs and waste management. Further, under this component of the project, creation of a conducive regulatory and policy framework, along with the training of the relevant institutions for implementation of the SC and SAICM is envisaged. Some of the activities for achieving Outcome 1.1 has already been carried out. However, a large number of activities for achieving the

Measure		MTR Rating[1]	Achievement Description
			outputs/targets are still to be carried out. Accordingly, **the progress towards achievement of results for Outcome 1.1 has been rated as Moderately Satisfactory**.
	- Outcome 1.2	**NR**	Outcome 1.2 relates to intensification and strengthening of the monitoring activities for chemicals and creation of PRTR database. The project has initiated the efforts (prepared TOR for appointing a consultant) for some of the activities to achieve this outcome. However, there are issues (project design issues) with this Outcome (please see recommendation 4). Due to this reason the **progress towards achievement against this Outcome has not been rated**.
	- Outcome 2.1	**S**	Component 2 of the project is focused on facilitating demonstration of BEP and BAT for treatment and disposal of the HCW in the HCFs. While Outcome 2.1 of Component 2 is focused on creation of conducive conditions (regulations and standards) for implementation of the BEP and BAT at the national level, Outcome 2.2 is focused on facilitating implementation of BAP and BAT at the selected HCFs. Most of the activities/indicators provided in the results frame-work for Output 2.1 are either being implemented and are planned. It is likely that by the end of the project the proposed regulations and standards would be in place. Accordingly, **the progress towards achievement of results for Outcome 2.1 is rated as Satisfactory.**
	- Outcome 2.2	**MS**	As mentioned above Output 2.2 of Component 2 of the project is focused on facilitating demonstration of BEP and BAT for treatment and disposal of the HCW in the selected HCFs. Facilitation is to be done by carryout baseline assessment, training of the staff of the HCFs, **minimizing the waste stream, segregation of waste and introducing recycling activities** etc. Most of the activities/indicators provided in the results frame-work for Output 2.2 are either being implemented and are planned. However, the impacts and effectiveness of such activities is not visible. For example, the staff of the HCFs are still not clear about the need and procedure for segregation of waste for implementing BEP and BAT. Further, there is lack of understanding amongst the staff regarding the possibilities to recycle the HCW (please see recommendation 4). Accordingly, the **progress towards achievement of results for Output 2.2 has been rated as Moderately Satisfactory**.
	- Outcome 3.1	**S**	Component 3 of the project is a follow up of the Component 2 of the project, and is aimed at implementation of BEP and BAT at the HCFs. While doing so the project is to also make good use of some of the existing facilities for non-burn technologies (microwave, autoclave) at some of the HCFs. Also, the project is to upgrade the incinerators at some of the HCFs to minimise the release of UPOPs. Apart, from the use of existing facilities for non-burn technologies and up gradation of the incinerators, the project is to provide new equipment for establishment of non-burn technologies for treatment of HCW. The aim of Component 3 is to reduce the release of UPOPs of about 19gTEq/yr. Output 3.1 of Component 3, relates to the feasibility study in terms

Measure		MTR Rating[1]	Achievement Description
			of technology type (microwave, autoclave), technical specifications, and cost effectiveness of the new non-burn technologies based HCW treatment facilities to be established under the project. Output 3.1 also includes the technical specification of the APCS for up-gradation of some of the existing incinerators. The project has already worked out the TOR for the consultants to be hired for carrying out the activities for achieving the Output 3.1. Accordingly, **the progress towards achievement of results for Outcome 3.1 is rated as Satisfactory**.
	- Outcome 3.2	**U**	As mentioned above under Outcome 3.2, new non-burn technology based HCW management facilities would be created as some of the HCFs. The activities for achieving this Outcome can only be carried out after achievement of Outcome 3.1. Considering that activities for achieving 3.1 are yet to be initiated, further, considering the procurement and establishment of HCWs management facilities would be a time-consuming process, the Outcome 3.2 would be achieved only in case a no-cost extension to the project is provided (please see recommendation 6). As mentioned before (under Outcome 2.2), presently there is lack of understanding amongst the HCF staff regarding the need to segregate the waste, recycle the treated waste to the extent possible etc. to ensure that there is no release of UPOPs in the overall process of using non-burn technologies for HCW management. For the couple of HCFs where non-burn technologies are already in use (these non-burn facilities were created with support from the donor community in an earlier project), the final disposal of the shredded waste is carried out at the dumpsites (where it eventually gets burned) leading to release of UPOPs. The project has targeted reduction of release of 19.0 gTEq/ yr. of UPOPs from the HCFs where the interventions on the ground are being supported by the project. This is against the baseline figure of release of 19.0 gTEq/ yr. from these HCFs. Thus, the project is targeted zero release of UPOPs due to treatment of HCW at the targeted HCFs. It is to be noted that this is not possible, firstly because not all the facilities will be using the non-burn technologies and secondly as all the medical waste (after treatment) can't be recycled. Some of the material like bandages, gauges etc. would still need to be burned (please see recommendation 1). As the targeted reduction in the release of UPOPs can't be achieved, **the progress towards results for Outcome 3.2 is rated as Unsatisfactory.** With the correction in the figures for targeted reduction in the release of UPOPs and implementation of the recommendations, the situation would change by the end of the project.
	- Outcome 4.1	**S**	Component 4 of the project is focused on reducing the release of UPOPs due to management of SW. Outcome 4.1 of Component 4 is to facilitate implementation of the measures to reduce the release of UPOPs by way of awareness creation, training, capacity building of stakeholders and regulations. Most of the activities/indicators provided in the results frame-work for Output 4.1 has already been implemented. The regulations

Measure		MTR Rating[1]	Achievement Description
			regarding the management of SW are likely to be in place by the end of the project. Accordingly, the **progress towards achievement of results for Output 4.1 has been rated as Satisfactory**.
	- Outcome 4.2	**MS**	Outcome 4.2 of the project pertaining to reduction in the release of UPOPs due to management of SW is focused on the engagement of communities already involved in the informal management of solid waste. This includes waste separation and recycling; development of small businesses based on waste recycling and composting. The reduction in the release of UPOPs is to be achieved by enhancing the "3R" economy and enabling municipalities to establish Public Private Partnerships (PPP) schemes with the support of NGOs that can at the same time reduce the waste flows being burnt, reduce poverty and provide an alternative opportunity for people living at the dumpsites. The targeted reduction in the release of UPOPs by these measures above is 3.0 gTEq/ yr. In the baseline situation the inert parts (no decayable like plastic, metals, glass, rubber) of the SW were not getting combusted at the dump sites as there were gets sorted out at the dumpsites. Thus, it is the collection of decay-able organic matter (food waste, paper etc.) and their disposal in ways other than dumping/burning which would lead to reduction in the release of UPOPs. The project has either implemented or is planning to implement the activities mentioned in the results framework to achieve the Outcome 4.2. The project is supporting collection of waste paper at the source of generation and its recycling. The project is also supporting collection of some of the organic waste at the source of generation (markets, food outlets etc.) and its disposal by the CBOs by composting. However, the scale of such activities is quite small. Considering the present scale of activities for collection of the waste at the source of generation and considering the fact that the inert part of the SW in the baseline case was not getting combusted at the dump sites, the targeted reduction of 3.0 gTEq/ yr. is not expected to be achieved, if corrective actions are not implemented (please see recommendation 3). Accordingly, the **progress towards results for Outcome 4.2 has been rated as Moderately Satisfactory**.
	- Outcome 4.3	**U**	Under Outcome 4.3 of the project, waste management practises (non-burn) are to be implemented at dumpsites to reduce the release of UPOPs due to burning of SW. The targeted reduction in the release of UPOPs due to the emergency measures is 20.0 gTEq/ yr. The project design has not provided for any emergency measures for reduction of release of emissions of UPOPs at the dumpsites (please see recommendation 2). Also, there is no visibility regarding the funds which would be required for carrying out the emergency measures at the dumpsites. There is no action on this front by the project. Thus, with the present state of affairs, no achievement towards reduction in the release of UPOPs due to emergency measures is expected. Accordingly, **the progress towards achievement of results for Outcome 4.3 is rated as Unsatisfactory**.

Measure	MTR Rating[1]	Achievement Description
Implementation and adaptive management	**S**	The project is being implemented under NIM with the Ministry of Environment and Forestry (MEF), as the responsible agency for the achievement of the project results as the implementing partner (national implementing partner). The implementation of the project on a regular basis is done by the project management unit (PMU). The project has a full-time national project manager (NPM) supported by the project administrative staff and a full time 'Technical Advisor'. Consultants have been engaged to undertake studies/activities that establish a baseline and identify gaps that inform the implementation partners delivery of planned project activities. UNDP CO has supported MEF's request for procurement of the consultants in consultation with the PMU, when there was a challenge to the transfer of funds to the government account. The Project Steering Committee (PSC) is in place and plays a critical role in project monitoring and evaluation by quality assurance, using evaluations for performance improvement, accountability and learning, and ensuring that required resources are committed and providing overall direction to the project team. As the PMU has a full time 'Technical Advisor' there is adequate technical capacity within the project implementation team to guide and evaluate the work carried out by the consultants. Project implementation has responded to changing conditions and risks, and taken advantage of opportunities for partnerships and actions that support the overall project objective. The project had a slow start due to delayed hiring of the project manager and the other members of the project team. A key reporting requirement, the inception report, was prepared after the inception workshop of the project. The PIRs of the years 2018 and 2019 (draft) were prepared, as per the requirements. The work plans for the project are prepared and followed. Quarterly progress reports for the project are also prepared regularly. Accordingly, **the management of the project is rated Satisfactory.**
Sustainability	**L**	At an aggregate level, technical risks to sustainability of the project are considered low. The financial sustainability of the project is assessed to be likely. At this mid-point in project implementation, socioeconomic sustainability is considered as likely. From the view point of institutional framework and governance risks, the sustainability of the project is Moderately Likely. From the view point of environmental risk, sustainability of the project is Likely. At an aggregate level the sustainability of the project is assessed as Likely

1.3 Summary of conclusions

The project is implementing (or has planned to implement) most of the activities/targets mentioned in the result frame-work of the project. It is expected that by the end of the project the regulatory framework for

management of chemicals and UPOPs would be in place and there will be increased level of awareness/ capacity amongst the stakeholders for management of the chemicals and management of HCW and SW leading to reduction in the emissions of UPOPs. However, unless some corrective actions are taken, with the present state of affairs the level of reduction in the release of UPOPs would fall short of the targets set for the project. This is partly due to setting of the unrealistic targets and partly due to inadequate provision in the project design towards achieving the targets towards reduction in the release of UPOPs.

The project has envisaged reduction in the release of UPOPs due to implementation of the emergency measures, but the project design has not provided for any such emergency measures. During this MTR it is being recommended that the project facilitate implementation of non-burn technologies (e.g. composting) for treatment of SW in PPP mode. This will lead to reduction in the release of UPOPs due to treatment of SW. However, considering that the overall process of selecting the private partner, establishment of the facilities etc. is a long process, the results of such an initiative would get realised only after the implementation timelines of the project.

The project design has provided for complete elimination of release of UPOPs at the selected HCFs due to implementation of non-burn technologies. It must be appreciated that 100% elimination of the emissions of UPOPs is not possible, as some of the HCW can't be recycled and would need to be burned. However, the combination of the proper use (waste segregation at source and recycling of the waste) of non-burn technologies with the up-gradation of the incinerators as provided in the project design would ensure significant reduction in the emissions of UPOPs due to HCW management.

Although, the project design has not differentiated activities based on gender or age of the involved communities, women and children are expected to have a comparatively higher benefit from activities aimed at reducing the exposure to toxic substances and pathogens.

The establishment of the regulations for the management of SW and HCW along with the establishment of the standards would go a long way to ensure achievement of the objective of reduction in the release of UPOPs not only during the implementation timelines for the project, but also much beyond it.

1.4 Recommendations

Recommendation	Description	Responsible Organization/ Entity
1. Review the Targets for reduction in the emission of UPOPs due to Component 3 (Healthcare waste)	The baseline emissions are 19 gTEq/ Yr. The target for emission reduction is also 19 gTEq (Target 48). This is 100% reduction in the emissions. Complete elimination of the emissions of UPOPs from the medical waste is not feasible. Elsewhere in the 'Project Document' (Page 18) different figure has been provided for the emissions of UPOPs (490.1 gTEq/ yr.). It is recommended that the provisions be reviewed and revised (if required)	Project Team UNDP CO
2. Identify emergency measures for reduction of UPOPs due to burning of SW and facilitate their implementation	The Outcome 4.2 (Target 73) requires reduction in the emissions of UPOPs of 20 gTEq/yr. by implementing the emergency measures. However, the project design has not provided for identification and implementation of the emergency measures to achieve this Target. Although, the project design has provided for capacity building and awareness creation etc. the emergency measures, there are no provisions in the project budget to support implementation of the emergency measures.	Project Team UNDP CO SC

Recommendation	Description	Responsible Organization/ Entity
	It is recommended that the provisions in the project design be made for identification and facilitating implementation of the emergency measures.	
3. Promote alternatives to dumping of Organic Solid Waste	The project is promoting recovery of recyclable materials (metals, plastics, glass, paper) at the source of generation of the 'solid waste'. In the baseline situation recovery of such inert materials was happening at the dumpsites (except for the paper) for the SW. Thus, in the baseline the inert components of the SW were not leading to emissions of UPOPs. Recovery of recyclable materials at the point of generation of waste (instead of the dumpsites) is good, however, it is not leading to any reduction in the emissions of UPOPs as there is no reduction in the quantum (except some waste paper) and composition of the material **getting burned** at the dumpsites. It is recommended that the target (Target 74) for reduction in the emissions of UPOPs due to 3Rs be reviewed and made flexible to include the activities like composting by CBOs at the local level. The project is already promoting alternate methods for disposal of 'decay-able organic solid waste' at the community level by the CBOs using composting/ vermicomposting technologies, but the scale of such activities is very low. It is recommended that the project further promote the composting/vermicomposting at the level of CBOs, to dispose of the organic component of the SW, which doesn't lead to emission of UPOPs and help to achieve the Target of reduction of 3 gTEq/ Yr. due to waste segregation.	Project Team UNDP CO
4. Review of the provisions regarding PRTR	Outcome 1.2: Monitoring activities intensified and strengthened and PRTR database in place, has provided for the laboratory equipment and other such related activities. However, quantification and monitoring of the emissions of POPs and other hazardous chemicals is mostly done using the emission factors, mass balance methods, engineering calculations and activity rates etc. Thus, although strengthening of the capacity in the country to carry out laboratory operations is good, it is not contributing towards the overall objective of the project. It is recommended that the provision of Activities/Targets for Outcome 1.2 be reviewed and if required suitably modified.	Project Team UNDP CO
5. **Promote recycling of plastics in HCW**	The project is supporting use of non-burn technologies (Autoclave, Microwave) for disposal of HCW. Thus, the project is leading to disposal of HCW in an ESM. However, as the final disposal of the shredded waste out of the autoclave/microwave is still happening by dumping it at the dumpsites (where it eventually gets burned), there is no reduction in the emission of UPOPs. As per the requirements the use of non-burn technologies for HCW, after treatment the waste needs to be disposed of at a secured landfill or may be used for material recovery. It is recommended that such methods and the technologies be promoted, wherein the final disposal is done by recycling of the plastic parts of the HCW. This would require not only segregation of the	Project Team UNDP CO

Recommendation	Description	Responsible Organization/ Entity
	HCW (in terms of plastic and other wastes) but also the separation of sharps at the source of the waste generation. In case of HCW plastics, further segregation in terms of types (syringes, bottles, transfusion kits, gloves etc.) would be needed. Segregated component of plastics can then be treated separately using non-burn technologies (autoclave, microwave, gas chambers etc.) and sent for material recovery. It is further recommended that the project, facilitate awareness amongst and demonstration to the stakeholders regarding the practice to recycling of the plastic waste out of HCFs. (please see recommendation 8 as well).	
6. Extension to Implementation timelines	There was an initial delay in the start of the implementation of the project. Some of the activities involving long procurement processes are presently underway. These activities are important from the viewpoint of the results and effectiveness of the project. The procurement and subsequent implementation of the activities can only be completed if an extension of a year is granted to the project. Further, in the present case there is a need to provide hands-on training to the ground staff (hospital staff) on the procedures (like segregation of waste, separation of sharps, etc.) to be followed with the introduction of the non-burn technologies for the management of HCW. This should include the pilot run of the whole procedure to be followed for a sufficient period of time. Experience from other projects on health care waste management also highlight that this period after the receipt of the equipment in the HCFs is crucial and requires sufficient time to ensure full acceptance and good operation of the equipment. It is recommended that a one year no-cost extension to the implementation timelines request be considered, if put forth by the implementation in the last year.	Project Team UNDP CO UNDP RTA
7. Prioritize the hardware procurement activities	There is a provision of USD 1.3 million (out of total GEF funding of about USD 4.5 million) for procurement of HCW management equipment. Considering the long procurement process, it is recommended to prioritize procurement of these equipment to ensure timely and proper utilization of this provision. This will also help towards better overall utilization of the budget for the project.	Project Team UNDP CO
8. Facilitate implementation of measures/ technologies to dispose of SW in ESM and recycling of plastics in HCW by private sector participation.	There is a high level of interest amongst government counter parts to involve private sector for treatment of SW. The counties where the interventions under the project are being carried out has already initiated efforts in this direction. However, in the absence of any past experience and specific knowledge about the suitable PPP models for treatment of SW, the efforts are not focused. It is recommended that the project facilitate uptake of PPP for disposal of SW and for recycling of plastics in the HCW. In this regard following sequential activities may be undertaken; a) Preparation of a report on the best practices and case studies of PPP for SW in other developing countries having similar situation b) Based on a) and specific conditions of Kenya, recommendations regarding SW disposal technologies and	Project Team

Recommendation	Description	Responsible Organization/ Entity
	recycling of plastics in HCW and the corresponding PPP model c) Sensitization of the stakeholders (relevant government officials, politicians, representatives of industry etc.) about the findings of a) and b) above d) Study tour of the stakeholders to the countries/locations where such PPP initiatives are working successfully	
9. More involvement of private sector (e.g. waste recycling firms) in the project activities	The project design has provided for taking on board the private sector (recyclers) to increase the collection of recyclable waste. Somehow, the level of involvement of the private sector in the project is lagging. It is recommended that the level of involvement of the private sector be increased.	Project Team
10. Formalize the dropping of the activity to replace mercury devices with non-mercury devices	For the activity of developing the procedure and guidance for the replacement of mercury devices with non-mercury (Target 29). It was found during the survey that the inventory of Thermometers and Sphygmomanometer with mercury is not much at the HCFs. Accordingly, it was decided by the project team that this activity/Target be dropped from the results frame-work of the project. It is recommended to formalize this, through the SC meeting.	Project Team UNDP CO
11. Hire Technical Advisor for the project	It would help, if the project implementation gets the benefit from the expertise of an international technical expert, hired under a contact for a longer period (part-time) to advise the project team on a regular basis (please see recommendation 11). The project may appoint an international technical expert to help and provide guidance on technical matters.	Project Team UNDP CO

2. INTRODUCTION

2.1 Purpose of the Mid Term Review and Objectives

The objective of the mid-term review (MTR) is to assess progress towards achievement of the project objectives and outcomes as specified in the Project Document. It is also meant to evaluate early signs of project success or failure with the goal of identifying required changes that should be made in order to set the project on-track so that the intended results are achieved. The MTR has been carried out in compliance with the monitoring and evaluation plan as elaborated in the project document, and in line with GEF / UNDP policies.

2.2 Scope and methodology

The design of the MTR is based on the requirements set out in the ToR prepared by the UNDP CO (please see Annex A). Before undertaking the MTR, an 'Inception Report' was presented, including the proposed tasks, activities and deliverables, as well as a table of main review questions that need to be answered to determine and assess project results, and to identify where the information is expected to come from (e.g. documents, interviews and field visits). While carrying put the review of documents and the interviews and analysis of the collected data, efforts were made to do the analysis in terms of gender specific achievements. However, considering that in the present case the results framework of the project has not provided any gender specific indicators and Targets no specific gender responsive data collection tools and/or methodologies were used during the MTR. The review efforts have been focused on the following four categories of project progress;

- Project strategy
- Progress towards results
- Project implementation and adaptive management
- Sustainability

The table of mid-term review criteria and questions is presented in Annex B.

Sources of data and data collection

Data have been collected through an extensive desk review of all relevant documents, meetings and interviews with key stakeholders and site visits to answer the MTR review questions. The sources of data were carefully identified, in order to obtain useful evidence-based information that is credible and reliable.

- A desk review of the following documents was carried out (please see Annex C):
  - Progress reports and project documents; such as the UNDP Project Document (ProDoc), Project Information Form (PIF), Project Inception Report.
  - Project Monitoring documents, namely the Annual UNDP/GEF Project Implementation Reviews (PIRs); Minutes of the 'Steering Committee' meetings, Quarterly Project Reports, Quarterly Work Plans, Financial reports.
  - Project Outcome documents; consultancy reports generated through Project activities, TORs and RFPs prepared by the project team.
  - Background information (websites, reports, national policy papers, or other written info) from relevant Government ministries and institutions, as well as other stakeholders; background information on health care waste management and solid waste management; technical reports; project manuals and guidelines.

- Mission: Prior to the mission, stakeholders were contacted by UNDP CO Kenya to schedule meetings and site visits in an optimum way in order to meet with a maximum of relevant stakeholders. During the mission, interviews were held with the Project Team, UNDP CO, and a wide range of identified stakeholders, beneficiaries and key informants which included steering committee members, senior officials of various ministries, local Government. The mission was carried out during the period 19 August to 30 August 2019, and included the visits to Mombasa and Nakuru. The mission schedule is given in Annex D.

The review of documents provided the basic facts and information for developing a first draft mid-term review (MTR) report, while the mission was needed to verify the basic facts, obtain missing data and to learn the opinions of respondents to help interpret the facts. The individual interviews with key informants were based on open discussion to allow respondents to express what they feel as main issues, followed by more specific questions on the issues mentioned. The list of mid-term review questions of Annex B was used as a checklist to raise relevant questions and issues during the interviews that correspond to the level and type of involvement of the interviewee or the organisation visited.

Regarding the data analysis and methods for analysis, the documents listed in Annex C were reviewed and analysed. The notes of the interviews with key informants were used to verify facts and information presented in reports and documents and helped to formulate the conclusions and recommendations. A twelve-day mission has the limitation of potentially giving a snapshot impression only. Nonetheless, the mid-term reviewer felt that this mix of data collection and analysis tools has yielded viable answers to the review questions within the limits of available time and budget resources.

This review has been conducted in accordance with the principles outlined in the United Nations Evaluation Group 'Ethical Guidelines for Evaluation' (see Annex F).

2.3 Structure of the mid-term review report

The review has been undertaken in accordance with the UNDP guidelines on mid-term reviews (UNDP, 2014)[2] as well as general criteria of UNDP evaluations. This report is structured according to the table of contents that is given in Annex B of the MTR guidelines (UNDP, 2014), and the Terms of Reference issued by UNDP Country Office, except that the Chapter on the finings has been split into four separate chapters to accommodate the contents and improve the readability of the report.

The report is organised as follows;

- Chapter 1 contains the Executive Summary
- Chapter 2 provides an Introduction to the project
- Chapter 3 covers the Project Description and background context.
- Chapter 4: Findings - project strategy
- Chapter 5: Findings - progress towards results
- Chapter 6: Findings - project implementation
- Chapter 7: Findings - sustainability
- Chapter 8: Conclusions and Recommendations

For easy and ready reference, Annex B shows where the main review criteria and questions of the MTR can be located in different sections of the report.

[2] *Project-Level Monitoring: Guidance for Conducting Mid-term Reviews of UNDP-supported, GEF-financed projects* (UNDP, 2014), Also taking into account elements of the *Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed projects* (UNDP, 2012)

3. PROJECT DESCRIPTION AND CONTEXT

3.1 Development context; problems that the project sought to address[3]

While, the production and use of chemicals has its role to play in the development of the economy, its negative impacts on the human health and environment is of concern, the world over. Further, the developmental activities if not carried out in a sustainable manner leads to generation of more waste, whose handling, treatment and disposal has its own set of health and environmental issues. Kenya, needs to address the issues related to the harmful impacts of chemicals. The project is aimed at protecting the human health and the environment by managing the risks posed by production, use, import and export of chemicals and mitigating the release of UPOPs and other toxicants originating due to waste management in HCFs and the solid waste in the urban areas. Management of HCW management and SW management are the two priorities identified in the NIP for SC in Kenya.

On the HCW management side, the project design has provided for an integrated approach aimed at proper management of waste within the hospital facilities (increasing segregation, reducing generation) and replacing the current disposal waste methods (open burning or burning in single chamber incinerators) with the BAT/BEP in accordance with the provisions in the SC. To support implementation of BAT/BEP in the hospitals there are provisions for training the 'health care providers'. For the 'municipal solid waste' the project design has provided for promotions of 3R (Reduce, Reuse, Recycle) economy by enhancing upstream collection; ensuring the quality of recovered material; and facilitating the market for the recovered parts of the waste. The project also has a component related to the sound management of chemicals, by implementing activities on UPOPs monitoring, upgrading of the relevant regulation on chemicals, and establishing a PRTR database. The project has the provision to increase the uptake of the BAT/BEP in the management of healthcare waste and municipal solid waste by bringing in the policy and regulatory frameworks.

3.2 Description of the project: objective, outcomes and outputs

The stated objective of the project is "Reduction of the release of U-POPs and other substances of concern and the related health risks, through the implementation of environmentally sound management of municipal and healthcare wastes and of an integrated institutional and regulatory framework covering management of and reporting of POPs. "Accordingly, the project design has components / activities which are specific either to the 'Sound Management of Chemicals' or 'Reduction of UPOPs emissions due to HCW' or "Reduction in the UPOPs emissions due to SW'.

The project has four components. Each of the four components has their respective set of Outcomes. The project document has also provided a set of Outputs for each of the Outcome. The project design has identified different targeted set of activities to be carried out for each of the Output. Details regarding different Components of the projects and the Outcomes and the Outputs of the project are given in Table 4.

Table 4: Components and Outcomes of the project

Project Objective/ Component	Outcome	Output
Project Objective: Reduction of the releases of U-POPs and other substances of concern and of the related health risk through the implementation of ESM of municipal and healthcare waste and of an integrated institutional and regulatory framework covering management and reporting of POPs.		
Component 1: Streamlining Sound Management Of Chemicals And Waste Into National And County Development	Outcome 1.1: Policies, strategies regulatory and policy framework integrating the provisions of streamlining chemicals management into development activities (specifically those of	1.1.1: Overall policy framework and specific regulatory measures covering environmentally sound management of chemicals in general and POPs in particular through chemicals life cycle management developed and implemented.
		1.1.2: Key institutions have knowledge and skills to

[3] Based on the information in the Project Document

Project Objective/ Component	Outcome	Output
Activities Through Capacity Building Of MENR, MOH, County Governments Of Nairobi, Kisumu, Nakuru And Mombasa And The NGOs - CBOs	the Stockholm convention and the SAICM recommendations) adopted and institutional capacity on U-POPs and waste management enhanced.	formulate and implement necessary chemicals and waste environmental policies, consistent with sound chemicals management principles and obligations under international agreements
		1.1.3: Key institutions have incorporated sound management of chemicals and wastes, including POPs, in their activities.
		1.1.4: National coordinating meetings on POPs held regularly (4 times per year) without GEF financial support
	Outcome 1.2 Monitoring activities intensified and strengthened and PRTR database in place.	1.2.1: At least 70% of laboratory analyses in research and monitoring institutions required to monitor the implementation of national policy on hazardous chemicals and wastes being carried out on a cost recovery basis
		1.2.2: 70% of universities nationwide include issues of hazardous chemicals and wastes, risks and legislation, in their curriculum
		1.2.3: PRTR Database and reporting system in place.
Component 2. Introduce environmentally sound management of health care waste in selected healthcare facilities; policy and strategic plans to prepare them to adopt BAT and BEP disposal	Outcome 2.1 Personnel of hospital facilities and control authorities at central and county levels have enough capacity guidance and equipment to manage healthcare waste in an Environmental Sound Manner	2.1.1: Procedures and guidelines for the assessment and implementation of hazardous waste management at healthcare facilities built on lessons and examples from the application of the I- RAT tool under the GEF4 /UNDP Global projects and on the WHO bluebook "Safe Management of Wastes from Health- care Activities" developed and adopted
		2.1.2: A national healthcare waste handbook containing guidelines for HCWM drafted and adopted by the MOH, including introduction of non-mercury devices in the HCFs
	Outcome 2.2 Implementation of BAT/BEP at selected hospital facilities successfully demonstrated and measured against the baseline	2.2.1: Hospital personnel at all levels trained on the implementation of the above procedures
		2.2.2: Baseline assessment of each healthcare facility based on the assessment procedures developed in 2.1.1 carried out, and waste management plans based on the baseline assessment level drafted and implemented
		2.2.3: ESM management of healthcare waste (based on WHO bluebook) implemented in 4 facilities in each county (12 facilities in total) including replacement of mercury devices with non-mercury
		2.2.4: Final assessment of the healthcare facility to measure results achieved with the implementation of the ESM against baseline is carried out and estimates amount of U- POP releases avoided.
Component 3. Demonstration of sound healthcare waste disposal technologies in a selected number of healthcare facilities in each county	Outcome 3.1. Feasibility analysis and procurement of ESM technologies for healthcare waste disposal completed	3.1.1: Feasibility study and terms of reference for non-combustion or low-U-POPs emission technologies for healthcare waste disposal in selected hospitals or waste management facilities drafted.
	Outcome 3.2 BAT/BEP technologies for the disposal of healthcare waste successfully established and demonstrated, with a potential reduction of U-POPs emissions in the order of 19gTeq/year	3.2.1: Demonstration and performance assessment of the technologies in the selected facilities completed (at least 4 facilities or an overall amount of waste in the order of 630t/yr.)
		3.2.2: Waste disposal activities of hospital facilities/programs are documented and their performance is evaluated to exemplify best practices in

Project Objective/ Component	Outcome	Output
		health-care waste management.
		3.2.3: Useful replication toolkits on how to implement best practices and techniques are developed
Component 4. Minimizing releases of unintentionally produced pops from open burning of waste.	Outcome 4.1. Awareness raising and capacity strengthening on ESM of solid waste ensured.	4.1.1: Awareness raising activities for the communities and the municipalities aimed at enhancing 3Rs of waste
		4.1.2: Regulatory framework for the recovery of waste materials (glass, organic, plastic) and for licensing of the recovery activity at county and central levels improved to integrate SC requirements
		4.1.3: Counties provided with training manuals, and technical assistance for the management of solid wastes.
	Outcome 4.2 Sound Management of solid waste in targeted municipalities implemented with the support of NGOs, with a reduction of unintentionally produced POPs from the burning of solid waste of 23 g I-TEQ/year (20 % of the current estimate of 247 g I-TEQ/year). Emergency plan to reduce exposure of population to harmful substances implemented.	4.2.1: Communities selected for demonstrating plans of actions for the reduction of solid waste open burning by increasing 3Rs of waste.
		4.2.2: Initiatives for reducing, reuse and recycle of waste and for composting, collection of compostable municipal waste for communities in three counties of Nairobi, Mombasa and Nakuru implemented with a PPP approach and supervised with the support of NGOs.
		4.2.3: Local initiative for the re-use / recycling of other non- hazardous waste streams (i.e. plastics).
	Outcome 4.3 Municipal waste disposal sites with adequate management practices (non-burn).	4.3.1: Prioritization of open-burning landfills to be closed and cleaned up, emergency plans including social and resettlement issues and cleanup plans for at least 3 landfills drafted.
		4.3.2: Emergency measures for reducing release of contaminants in the environment and the exposure of the population implemented in one high priority site.

3.3 Project Implementation Arrangement

UNDP is the GEF Implementing Agency (IA) for the project and is implementing the project under NIM modality. The project is being executed by the Ministry of Environment and Forestry (MEF), with the overall responsibility for the achievement of project results as the Implementing Partner (IP). The project is being executed according to UNDP's National Implementation Modality (NIM), as per the NIM project management implementation guidelines agreed by UNDP and the Government of Kenya. As a senior supplier, UNDP also has a role of project assurance. This role is being exercised by the UNDP Programme Officer responsible for the project, based in the UNDP Country Office (CO). UNDP provides the overall management and guidance from its Country Office in Nairobi and the Regional Hub in Istanbul, and has taken the responsibility for monitoring and evaluation of the project as per normal GEF and UNDP requirements.

MENR/MEF as an IP is being subjected to the micro assessment and quality assurance activities as per Harmonized Approach to Cash Transfers to Implementing Partners (HACT) framework. MEF has designated a senior official as the National Project Director (NPD), the Principal Secretary as the accounting officer and Director of the Ministry's Multilateral Environmental Agreements as the coordinator in charge for the day to day supervision of the PMU for the project. The NPD is responsible for overall guidance to project management, including adherence to the Annual Work Plan (AWP) and achievement of planned results as outlined in the Project Document, and for the use of UNDP funds through effective management and well-established project review and oversight mechanisms. The NPD also ensures coordination with various ministries and agencies, provides guidance to the project team to coordinate with UNDP, reviews reports and

looks after administrative arrangements as required by the Government of Kenya and UNDP. This IP was subjected to the micro assessment and quality assurance activities as per Harmonized Approach to Cash Transfers to Implementing Partners (HACT) framework.

The implementation of the project on a regular basis is done by the project management unit (PMU). The project has a full-time national project manager (NPM) supported by the project administrative staff and a full time 'Technical Advisor'. At the county level the implementation of the project is supported by the government officials from MNER and the officials from the Ministry of Health.

The Project Steering Committee (PSC) is in place and plays a critical role in project monitoring and evaluation by quality assurance, using evaluations for performance improvement, accountability and learning, and ensuring that required resources are committed and providing overall direction to the project team. PSC oversees the work of the Project Management Unit (PMU). The PSC consists of a Chairperson (MEF) and a co-chair representing the UNDP Country Office; with PSC members from MEF, MOH, National Treasury, NEMA, and UNDP. The primary function of the PSC is to provide the directions that allows the Project to function and achieve its policy and technical objectives, and to approve the Annual Work Programmes (AWP) and M&E reports.

The project has also a technical committee made of all the project partners. The technical Committee prepares the AWP and the QWP for consideration and approval by the PSCV.

3.4 Main stakeholders

The main beneficiaries of the project activities are the general public, consumers and communities which may be be getting exposed to the UPOPs and other toxins due to the treatment of HCW and the SW. At the decentralized level, project stakeholders are the county health and environmental authorities, were the HCFs have been selected for the project activities, as well as the administration of the selected facilities.

For the MSW, the industries who uses the materials which are derived from the waste recycling operation, or which intend to invest or operate in the 3R economy are relevant stakeholders and will participate as project partners. CBOs are on the key stakeholders in the municipal waste sector.

The MOH and NEMA have decentralized functions from its County and sub-county Offices. Existing institutions already have a presence in the Counties and have or are in the process of establishing offices in the sub-county levels which the reference points for the CBOS and NGOS active in the project. The roles allocated to the county governments include the implementation of national policies on environment and natural resources (including soil and water conservation and forestry) and local tourism, among others. The county governments established in each county have to include environment management committees to ensure sustainable use and management of natural resource.

NGOs in Kenya are involved in a number of social, economic, environmental and political issues. Their work covers gender, human rights, environment, advocacy and participatory development. The majority have been assisting in strengthening civil society through informing and educating the public on various issues, such as their legal rights, entitlement to services or by helping them attune to government policies.

Table 5 provides the details of different important stakeholders for the project and their respective roles in the project.

Table 5: Key Stakeholders and their roles in the project

Stakeholder	Relevant Roles
Ministry of Environment and Forestry (MEF)	Leadership and coordination for the implementation of the project. Executing and implementing the project. Providing co-finance. Technical consulting and capacity building. Approving expenditures and managing the PMU

Stakeholder	Relevant Roles
National Environment Management Authority (NEMA)	Advisory oversight at executive level. Support at a policy advisory level.
Ministry of Health (MOH)	Leadership and coordination for implementation of the project. Executing and implementing the project. Providing co-finance. Day-to-day operational execution of the project. Technical consulting and capacity building. Marketing and infrastructure development. Directly supervises the activities of HCF in consultation with the relevant counties
Government Chemist Department (GCD)	Providing co-finance. Executing and implementing the project. Marketing and infrastructure development. Support to development and growth.
Water Resources Authority (WRA)	Providing co-finance. Implementation of the project activities.
University of Nairobi (UON)	Implementation of selected project activities under guidance and support of UPOPs Monitoring.
Agrochemicals Association of Kenya (AAK)	Executing and implementing the project. Marketing and infrastructure development. Support to development and growth of the Southern Rangelands conservancies
Kenya Association of Manufacturers (KAM)	Providing co-finance. Implementation of the project activities. Support to development and growth of the private sector
Kenya Disaster Concern (KDC)	Providing co-finance. Implementation of the project activities. This NGO was found not to be active and it has been downsized and its activities are now undertaken by Kisumu County.
Greenbelt Movement (GBM)	Providing co-finance. Executing and implementing the project. Marketing and infrastructure development. Support to development and growth of the Southern Rangelands conservancies
Mombasa Integrated Solid Waste Management Group (North Mombasa County)	Responsible for the implementation of the project activities. Participating in education and capacity building activities. This partner was found moribund and its role taken by the Mombasa County
Catholic Association (a group of CBOs in the county of Kisumu).	Providing linkage between the capacitated Southern Rangelands conservancies, Northern Rangelands Trust, investors and conservancy owner-managers on a national level This NGO has been moribund and its role taken by the county of Kisumu

4. FINDINGS: PROJECT STRATEGY

The findings are based on the review criteria and questions (see Annex B), so that a link can be made between what was asked and what was found. In this Chapter a review of the strategy of the Project, in terms of its design and results framework, has been presented. The strategy of the project was the result of consultations and background analysis during project design stage and relevance to Kenya's development context.

4.1 Project design

Mid-term review questions (see Annex B)

- What is the problem being addressed by the project and are the underlying assumptions correct?
- Does the project strategy provide the most effective route towards expected/intended results?
- Were lessons from other relevant projects properly incorporated into the project design?
- How the project addresses priorities of Kenya? Was the project concept in line with the national sector development priorities and plans of Kenya?
- Were perspectives of those who would be affected by project decisions, those who could affect the outcomes, and those who could contribute information or other resources to the process, taken into account during project design processes?
- To what extent relevant gender issues were raised in the project design.
- Are there major areas of concern? Recommend areas for improvement.
- Does the project adequately take into account the national realities, both in terms of institutional and policy framework in its design and implementation?
- Is the project country-driven?
- If the project progress is not good, what changes could have been made (if any) to the project design in order to improve the achievement of the project's expected results during rest of the project implementation period.

4.1.1 Problem being addressed

The project is aimed at protecting the human health and the environment by managing the risks posed by production, use, import and export of chemicals and mitigating the release of UPOPs and other toxicants originating due to waste management in HCFs and the MSW in the urban areas. Management of HCW management and MSW management are the two priorities identified in the NIP for SC in Kenya. Kenya, needs to address the issues related to the harmful impacts of chemicals, but there are a number of barriers towards implementation of the initiatives towards doing so. The GEF project has following four components;

Component 1: Implementation of the 'Sound Chemicals Management Program'
Component 2: Introduction of environmentally sound management practices for health care waste
Component 3: Demonstration of sound healthcare waste disposal technologies
Component 4: Reduction in the release of UPOPs due to dumping of MSW

4.1.2 Project Strategy

For the 'Sound Management of Chemicals' part of the project, the strategy is centred around the effective ways towards implementation of the plans envisaged by the Stockholm National Implementation Plan (NIP) and the SAICM Implementation Plan (SIP). This part of the project is focused on the activities which have synergies with the other two components of the project (emission of UPOPs due to burning of HCW and emissions of UPOPs due to dumping of SW). Accordingly, the strategy for this part of the project comprises of the following

- Increase awareness among the industry and civil society on cleaner production, and on alternatives to POPs
- Increase in analytical service and the establishment of more sustainable laboratory services
- Improvement of regulatory texts and their enforcement towards the implementation of a sound management of chemicals.

For the Components of the project pertaining to addressing the emissions of UPOPs due to HCW management, the project strategy addresses the two key issues of 'poor segregation' and 'poor choice of technology for treatment and disposal of waste'. Thus, the strategy comprises of the following;

- Building capacity at national, county and HCF level for the introduction of 'Best Available Technologies (BAT)' and 'Best Environmental Practices (BEP)'
- Drafting and disseminating technical guidance on HCWM, officially endorsed by the government
- Strengthening the legislative and policy framework governing HCWM and Mercury at national and county level
- Improving HCWM awareness and education
- Increase segregation and minimisation of waste. This is to be done mostly by establishing and enforcing HCW management units in the HCFs and providing on-site continuous training and technical assistance to the personnel of the HCFs. In addition, key waste management equipment (bags, bins, cart, sharp boxes) are to be provided to the project HCFs.
- Improvement of HCW disposal technology and increased centralisation of waste disposal.

For the Component of the project pertaining to the MSW, the strategy is focused on the following:

- Creation of alternative approaches to dispose different constituents of the 'Solid Waste' using 'integrated solid waste management'.
- The strategy relies on the engagement of communities already involved in the informal management of solid waste. This includes waste separation and recycling; development of small businesses based on waste recycling and composting. This will be achieved by enhancing the "3R" economy and enabling municipalities to establish Public Private Partnerships (PPP) schemes with the support of NGOs that can at the same time reduce the waste flows being burnt, reduce poverty and provide an alternative opportunity for people living at the dumpsites.
- Support to the development of a new stream of recycling for plastics
- Development of emergency measures to avoid accidental or voluntary burning of wastes at the dumpsites
- Active involvement of three sets of actors that are essential to build an alternative, sustainable scenario: the private sector, the CSOs and the counties.

The present GEF project is the first in Kenya after the NIP for SC was finalized for the country. Prior to the present projects GEF support for Enabling Activities for the Stockholm Convention on (POPs)' and 'Kenya NIP for SC update' were provided. Kenya had in the past participated in regional projects in the focal area of 'management of chemicals'. The 'project document has not mentioned explicitly, that the lessons learned from these past projects being incorporated in the design of the project, it is implicit.

The project design has emphasized on building awareness of the links between waste management and public health. This includes implications of exposure to dioxins and Mercury for differentially more vulnerable populations, such as females and children. For the MSW, although the project design has not differentiated activities based on gender or age of the involved communities, women and children are expected to have a comparatively higher benefit from activities aimed at reducing the exposure to toxic substances and pathogens.

There are minor issues with the project design due to which the progress of the project at the time of MTR is suffering. More details about these minor issues and the recommendations to improve the results by the end of the project are provided in the next section (please see section 4.2).

For HCW, while the component 2 provides for proper management of waste within the hospital facilities (increasing segregation, reducing generation), component 3 provides for replacing the current disposal waste methods (open burning or burning in single chamber incinerators) with the BAT/BEP in accordance with the provisions in the SC. To support implementation of BAT/BEP in the hospitals there are provisions for training the 'health care providers'. For the 'municipal solid waste' the project design has provided for promotions of 3R (Reduce, Reuse, Recycle) economy by enhancing upstream collection; ensuring the quality of recovered material; and facilitating the market for the recovered parts of the waste. The project design has also provided

for implementation of the measures at the waste dumpsites to address the release of UPOPs (due to burning of waste).

The project also has a component related to the sound management of chemicals, by implementing activities on UPOPs monitoring, upgrading of the relevant regulation on chemicals, and establishing a PRTR database. The project has the provision to increase the uptake of the BAT/BEP in the management of healthcare waste and municipal solid waste by bringing in the policy and regulatory frameworks.

The indicators for monitoring the results of the project doesn't have gender segregation. Similarly, monitoring plan for the project doesn't have provision for gender specific monitoring. However, the project team is gender segregating the achievements of the project while monitoring them.

4.1.3 Relevance and country drivenness

Kenya is a party to the SC, having ratified the Convention in September 2004. It subsequently developed its National Implementation Plan (NIP) in 2007. Kenya completed the process of updating the NIP in line with Article 7 of the Convention. Thus, the country developed and amended the priority policy and regulatory reforms as well as capacity building needs and required investment programs for POPs. In addition to SC Kenya has ratified a number of other chemicals related MEA. One of the aims of the project is to improve Kenya's compliance with the SC on POPs, particularly with regard to dioxins and furans. This addresses the priorities identified in the NIP for SC.

The Kenya government, by reviewing and updating its NIP and by approving its SAICM implementation plan, has already established strong pillars toward the sound management of chemicals. There is now the need to start an effective way to implement the plans envisaged by both the Stockholm National Implementation Plan (NIP) and the SAICM Implementation Plan (SIP).

The Kenya National Chemicals Profile (KNCP, 2010) identified a number of risks for human health and the environment in Kenya, and identified priorities for sound chemicals management. The highest were air pollution, improper management of hazardous waste and storage of obsolete pesticides. The government of Kenya drafted in 2008-2012, in cooperation with the WHO, the Health Care Waste Management plan, outlining the HCWM status in the counties, defining priorities and objectives, stressing the fact that the management of HCW is an integral part of hospital hygiene and infection control.

The SAICM Implementation Plan for Kenya (2011-2014), has the goal of reducing the identified risks to human health and the environment due to exposure to chemicals. The plan lists specific priority risks and hazardous activities. It provides a framework with themes and actions that Kenya needs to implement to address risks posed by chemicals. The plan proposes to strengthen national mechanisms such as policies, legislations, commissions, education programmes, information networks, etc. to facilitate the implementation of specific chemicals management activities at the national, county and enterprise levels.

4.2 Results framework / Log-frame

Mid-term review questions (see Annex B)

- How 'SMART', (Specific, Measurable, Attainable, Relevant, Time-bound), the midterm and end-of-project targets are?
- Are the project's objectives and outcomes or components clear, practical, and feasible within its time frame?
- Has the progress so far led to, or could in the future catalyse, beneficial development effects (i.e. income generation, gender equality and women's empowerment, improved governance etc..) that should be included in the project results framework and monitored on an annual basis?
- Are the broader development and gender aspects of the project being monitored effectively?

The Results Framework / Log-frame of the project as given in the project document is presented in Table 6. The Table provides a set of different Outcomes (along with the list of Outputs) for the four components of the project. Also, given in the Table is the Activities/Targets for achieving each of the Outputs of the project.

Table 6: Project Results Framework (as per Project Document)

Objective/ Component	Outcome	Output	Indicator	Baseline	Targets End of Project[4]
Project Objective: Reduction of the releases of U-POPs and other substances of concern and of the related health risk through the implementation of ESM of municipal and healthcare waste and of an integrated institutional and regulatory framework covering management and reporting of POPs.					
			• Existence of a SC compliant institutional and regulatory framework covering management and reporting of POPs. • Amount of U-POPs releases in the environment from HCW disposal avoided. • Amount of U-POPs release in the environment from municipal waste disposal avoided.	Chemicals have received heightened attention in Kenya. Kenya is an active participant in SAICM, being current president of ICCM4, a Party to Rotterdam, Basel, Stockholm Conventions and signatory to the Minamata Convention on Mercury. Despite having good policies, strategies, guidelines and legislation on solid waste, the country continues to dump most of its waste in sites that require eventual open burning.	***Target A*** • Guidelines for relevant institutions on how to streamline chemicals management into their policies, strategies and action plans ***Target B*** • Updated pieces of relevant legislation ***Target C*** • Review of the HCWM guidelines ***Target D*** • Selection of health care facilities that can be used to demonstrate environmentally sound management of HCW ***Target E*** • At least 50% of HCW is disposed in ESM ***Target F*** 30% of Municipal waste recycled through recycle, reuse and recovery methods
Component 1: Streamlining Sound Management Of Chemicals And Waste Into National And County Development Activities Through Capacity Building Of MENR, MOH, County Governments Of Nairobi, Kisumu, Nakuru And Mombasa And The NGOs -– CBOs					
	Outcome 1.1: Policies, strategies regulatory and policy framework integrating the provisions of streamlining chemicals management into development activities (specifically those of the Stockholm convention and the SAICM recommendations) adopted and institutional capacity on U-POPs and waste management enhanced.				
		1.1.1: Overall policy framework and specific regulatory measures covering environmentally sound management of chemicals in general and POPs in particular through chemicals life cycle management	• Availability of a completed and comprehensive gap analysis. • Availability of a nationally endorsed roadmap for improving the existing regulations. • Number of new or reviewed regulatory acts to take into account in a consistent manner the current provisions of the SC convention on POPs, with respect to the overall number of	• A preliminary analysis of the Kenyan policy and legal framework on chemicals affected by the SC has been carried out under the SAICM activities. • Most of the existing regulations need to be amended for ensuring compliance with the Stockholm Convention, Rotterdam Convention, the Basel Convention and the Minamata Convention on Mercury and other related MEAs ratified by the country. • The existing legislation is	***Target 1*** • Gap analysis completed within 12 months from the project start. A policy and legislation review roadmap approved within 24 months from project start. ***Target 2*** • The identified polices and legislation regulation/s or their associated norms are amended for compliance with the SC requirements.

[4] The numbering of the Targets has been done at MTR for easy reference

Objective/ Component	Outcome	Output	Indicator	Baseline	Targets End of Project[4]
		developed and implemented.	relevant regulatory norms to be reviewed identified in the gap analysis.	not adequately providing an integrated and consistent framework for the management of waste, chemicals and chemical pollution in the Country in line with Kenya's international obligations as party and signatory to the said MEAs	
		1.1.2: Key institutions have knowledge and skills to formulate and implement necessary chemicals and waste environmental policies, consistent with sound chemicals management principles and obligations under international agreements	• Availability of capacity building needs assessment report. • Existence of a Training Institution on Chemical Management	• Based on the outcome of the Kenya chemical profile (2011), there is a general need in Kenya to provide training programs on chemical information work or about collecting, collating, storing, retrieving and disseminating information on risks and hazards of chemicals. In addition, there is an urgent need to review the capacity of institutions that implement existing chemical management and environmental regulations.	***Target 3*** • Capacity building needs assessment for central and local institutions in charge of chemical management completed within 12 months from project start. ***Target 4*** • Training materials tailored to the Kenyan situation, developed on POPs management, POPs monitoring, chemical emergency response and 3R of waste. ***Target 5*** • At least 2 Excellence Training Centers on chemicals management established at a main Academic Institution ***Target 6*** • At least 200 staff coming from all Kenyan counties and affiliated to governmental institutions, chemical industry and waste management companies selected and trained ***Target 7*** • At least 2 training cycles (totally 10 days each) performed during project implementation. Effectiveness of training measured by means of pre-training and post-training examination of the participants ***Target 8*** • Trainees who successfully pass post-training examination receive a certificate in Chemical management. An award for most successful trainees consisting in contracts on Chemical Management at key Kenyan Institutions established.
		1.1.3: Key institutions have incorporated sound management of chemicals and	• Number of POPs units at local and central environmental authorities trained and established. • Availability of	• The management of chemicals and waste in Kenya is very low at all levels (national / county). • Although a certain number of regulations are in place,	***Target 9*** • Guidance and procedures for the integration of POPs issues in: chemical management, environmental permitting, waste management are

Objective/ Component	Outcome	Output	Indicator	Baseline	Targets End of Project[4]
		wastes, including POPs, in their activities.	guidance documents on POPs and chemical management for local and central authorities. • Availability of inspection reports.	their enforcement in specific areas is minimal. • Existence of Public Health Officers in the selected HCFs	developed for the local and central environmental authorities. ***Target 10*** • Units on POPs management are trained and established in key local and central institutions. ***Target 11*** • At least 6 inspections / year on the fulfilment of POPs regulation in the country performed.
		1.1.4: National coordinating meetings on POPs held regularly (4 times per year) without GEF financial support	• Availability of the formal act for the establishment of the National Chemical Management Coordination Office (NCMCO). • Number of coordination meetings held.	• Because of lack of policy requirement, the committee is formed on a need basis. • Considering the Terms of Reference for inter-ministerial coordination developed under SAICM, the project will operationalize this coordination in a sustained manner.	***Target 12*** • A National Chemical Management Coordination Office (NCMCO) established at the Ministry of Environment, composed by representatives of relevant Ministries. ***Target 13*** • Coordination Meetings of the National Chemical Management Coordination Office
	Outcome 1.2 Monitoring activities intensified and strengthened and PRTR database in place.				
		1.2.1: At least 70% of laboratory analyses in research and monitoring institutions required to monitor the implementation of national policy on hazardous chemicals and wastes being carried out on a cost recovery basis	• Availability of a national plan for monitoring of POPs which establishes a market-based mechanism.	• Based on the Kenya National Profile, most laboratories lack sufficient equipment for proper analysis. There are few laboratories which are equipped with analytical instruments for analyzing POPs. • The most serious issue is however the fact that the laboratories work mainly with discontinuous project funds therefore their operation is not fully sustainable.	***Target 14*** • Capacity building and equipment upgrading needs identified. ***Target 15*** • National plan for environmental and industrial monitoring, which identifies POPs monitoring obligations for key industrial and waste management activities developed and implemented. ***Target 16*** • A financial mechanism for ensuring the sustainability of POPs laboratories based on incentives and environmental taxes established and piloted for at least one year. ***Target 17*** • Two key laboratories on POPs analysis accredited following ISO 17025 standards and associated accreditation schemes ***Target 18*** • Up to 80 laboratories technicians and government staff trained on POPs monitoring related activities following international standards and requirements.
		1.2.2: 70% of universities nationwide	• Number of universities including curricula on chemical risk	• Undergraduate and postgraduate programmes in various areas of	***Target 19*** • University curricula for chemical risk assessment and

Objective/ Component	Outcome	Output	Indicator	Baseline	Targets End of Project[4]
		include issues of hazardous chemicals and wastes, risks and legislation, in their curriculum	assessment and management of hazardous chemicals and hazardous waste.	chemicals management are offered at various universities which include both public and private universities. However, a coordinated approach towards addressing matters pertaining to chemicals management is missing.	management of hazardous chemical and hazardous waste adopted by at least 70% of training institution. ***Target 20*** • One cycle of curricula completed in at least 2 universities within the project timeframe.
		1.2.3: PRTR Database and reporting system in place.	• Regulatory tool for the implementation and enforcement of POPs / PTS reporting and PRTR established.	• No PRTR Database and reporting system in place.	***Target 21*** • By the end of the project, a circular drafted and submitted to GoK for approval related to implementation and enforcement of POPs monitoring and PRTR system to ensure sustainability of the PRTR related ***Target 22*** • Demonstration of an Information Management System to support PRTR ***Target 23*** • A POPs/PTS database established to contain data related to industrial sources, and POPs contaminated sites in 2 Kenyan provinces, and all the country-wide available data on POPs environmental monitoring.
Component 2: Introducing environmentally sound management of health care waste in selected healthcare facilities; policy and strategic plans to prepare them to adopt BAT and BEP disposal.					
	Outcome 2.1 Personnel of hospital facilities and control authorities at central and county levels have enough capacity guidance and equipment to manage healthcare waste in an Environmental Sound Manner				
		2.1.1: Procedures and guidelines for the assessment and implementation of hazardous waste management at healthcare facilities built on lessons and examples from the application of the I- RAT tool under the GEF4 /UNDP Global projects and on the WHO bluebook “Safe Management of Wastes from Health- care Activities” developed and adopted	•Evidence that the guidelines for the Environmentally Sound Management of HCW, including rapid assessment based on the I-RAT tool, have been developed and officially adopted.	•The "National Guidelines for the Safe management of HCW" are not currently implemented in the pre-selected HCFs, do not contain any indication on the assessment of HCWM effectiveness, and are not fully compliant with the chemicals-related MEAs, especially the SC.	***Target 24*** •Revision/development of HCWM guidelines based on the last edition of the WHO bluebook (tailored to various facility types) which include tool and procedures for rapid assessment of HCWM ***Target 25*** •The above guidelines are officially adopted by all the pre-selected HCFs.
		2.1.2 A national	•Availability of the healthcare waste	•The "National Guidelines for Safe Management of	***Target 26*** •Revision/development of

Objective/ Component	Outcome	Output	Indicator	Baseline	Targets End of Project[4]
		healthcare waste handbook containing guidelines for HCWM drafted and adopted by the MOH, including introduction of non-mercury devices in the HCFs	management handbook and documentary evidence that it has been officially adopted. •Updated and reviewed Waste Regulations dating from 2006	Healthcare waste" need to be updated to be compliant with best HCWM practices. •Based on the preliminary survey of project HCFs, even the existing guidelines are not being implemented.	emission and discharge standards on monitoring HCWM practices. ***Target 27*** •Development of technical regulations for HCWM equipment and supplies. ***Target 28*** •Development of standards on technologies for the processing and final disposal of HCW. ***Target 29*** •Development of procedure and guidance for the replacement of mercury devices with non mercury
	Outcome 2.2 Implementation of BAT/BEP at selected hospital facilities successfully demonstrated and measured against the baseline				
		2.2.1: Hospital personnel at all levels trained on the implementation of the above procedures	•Number of staff from the project HCFs trained.	•Very limited training has been carried out in a small number of the preselected HCFs.	***Target 30*** •All the staff of the HCF will receive training on HCWM. ***Target 31*** •At least 200 staff from the project HCFs trained
		2.2.2: Baseline assessment of each healthcare facility based on the assessment procedures developed in 2.1.1 carried out, and waste management plans based on the baseline assessment level drafted and implemented	Baseline assessments conducted for all project facilities	None of the preselected HCFs underwent a detailed baseline assessment	***Target 32*** •I-RATs conducted for each of the HCFs participating / benefitting from the project. ***Target 33*** •UPOPs releases before implementation of BAT/BEP determined for each project facility.
		2.2.3: ESM management of healthcare waste (based on WHO bluebook) implemented in 4 facilities in each county (12 facilities in total) including replacement of mercury devices with non mercury	•All the project HCFs have introduced BEP in a satisfactory manner.	•The preliminary surveys conducted during PPG stage indicated that all the HCFs need a substantial improvement concerning the segregation, collection, transport, storage, and disposal of HCW.	***Target 34*** •Memoranda of Understanding (MoUs) signed with all project HCFs. ***Target 35*** •HCWM committees of all HCFs strengthened or established where missing. •HCWM policies, procedures and plans developed and implemented at each project HCF. ***Target 36*** •HCFs supported in minimizing waste streams, improving segregation and introducing recycling activities. ***Target 37*** •Each HCF evaluated to verify introduction of BEP practices. ***Target 38***

Objective/ Component	Outcome	Output	Indicator	Baseline	Targets End of Project[4]
					•At least 2000 mercury devices replaced by non mercury devices and safely stored pending disposal- .
		2.2.4: Final assessment of the healthcare facility to measure results achieved with the implementation of the ESM against baseline is carried out and estimates amount of U- POP releases avoided.	•Availability of final assessment report based on the HCWM guidance.	•Although figures from preliminary assessment of some HCFs have been reported in the National HCW management plan, no measurement of the effectiveness of implementation of BET/BAP has ever been attempted in any HCF in Kenya.	***Target 39*** •Final assessment conducted for each of the HCFs participating/ benefitting from the project with the assistance of properly trained project consultants. ***Target 40*** •UPOPs after implementation of best practices in HCWM determined for each project facility.
Component 3. Demonstration of sound healthcare waste disposal technologies in a selected number of healthcare facilities in each county					
	Outcome 3.1. Feasibility analysis and procurement of ESM technologies for healthcare waste disposal completed				
		3.1.1: Feasibility study and terms of reference for non-combustion or low-U-POPs emission technologies for healthcare waste disposal in selected hospitals or waste management facilities drafted.	•Availability of feasibility study. •Availability of cost-effectiveness analysis.	•The existing "National Guidelines for Safe management of health care waste" and the "National Health Care Waste Management Plan for Kenya 2008- 2012" do not contain any indications on the compliance of the technology with the SC, and still mention the Montfort incinerator as a viable option for the disposal of HCW	***Target 41*** •Cost-effectiveness and feasibility analysis of centralized treatment facilities in comparison with the current situation (one small treatment facility for each HCF) carried out. ***Target 42*** •Technical specifications for HCW treatment technologies drafted and approved. ***Target 43*** •Technical specification for APCS and for the upgrading of a recent double chamber incinerator to be compliant with the SC drafted and approved.
	Outcome 3.2 BAT/BEP technologies for the disposal of healthcare waste successfully established and demonstrated, with a potential reduction of U-POPs emissions in the order of 19gTeq/year				
		3.2.1: Demonstration and performance assessment of the technologies in the selected facilities completed (at least 4 facilities or an overall amount of waste in the order of 630t/yr.)	•Number of non-incineration technologies that are operational. •Number of incinerators reviewed and upgraded to the SC BA T/BEP requirements, and operational. •Amount of U-POPs release prevented by means of implementation of better disposal practices	•Currently in none of the pre-selected HCFs a non combustion technology for the treatment of HCW is operational. • Currently none of the incinerators installed at pre-selected HCFs fulfil SC BAT criteria; in some cases, even the most elementary APCSs are missing. •The current emissions of PCDD/F of the pre- selected facilities amount to an estimated 19 gTEq. •Currently in Kenya there are no Centralized Treatment Facilities - each HCF has its own treatment plant.	***Target 44*** •Non-incineration technologies procured, installed and tested servicing at least 11 HCFs. ***Target 45*** •Procurement of an initial set of HCWM related supplies for at least 12 HCFs. Staff trained in the operation and maintenance of the technologies installed at the HCFs ***Target 46*** •HCFs supported in the implementation of their plans (including recycling activities) as well as monitoring practices. ***Target 47*** •Agreements between CTFs

Objective/ Component	Outcome	Output	Indicator	Baseline	Targets End of Project[4]
					and PFs drafted and signed for each PFs served by a CTF.
		3.2.2: Waste disposal activities of hospital facilities/programs are documented and their performance is evaluated to exemplify best practices in health-care waste management.	•Proof of Performance test reports available •Proof of performance tests in at least three non- combustion disposal facilities and at least one revamped incinerator available. •HCW hazardous waste manifests available for at least 630 t of HCW yearly.	•Due to the lack of monitoring equipment, measurements of PCDD/F at the stack of incinerators were never taken in Kenya. •Experience on the conduction of Proof of Performance tests for both combustion and non-combustion technologies is missing in the country.	***Target 48*** •The release of at least 19 gTEq / yr. of PCDD/F prevented thanks to the installation of BAT disposal technologies. ***Target 49*** •Proof of performance tests for at least three non-combustion disposal facilities and at least one revamped incinerator carried out.
		3.2.3: Useful replication toolkits on how to implement best practices and techniques are developed	•Toolkit for replication of best practices made available.	•The existing national guidelines and plans do not include any toolkit for the implementation of SC compliant disposal technologies.	***Target 50*** •A practical toolkit for the replication of CTFs or single-facility BAT/BEP in other counties is drafted and endorsed by the government. ***Target 51*** •The toolkit will be properly disseminated to relevant stakeholders.
Component 4. Minimizing releases of unintentionally produced pops from open burning of waste.					
	Outcome 4.1. Awareness raising and capacity strengthening on ESM of solid waste ensured.				
		4.1.1: Awareness raising activities for the communities and the municipalities aimed at enhancing 3Rs of waste	•Level of awareness on 3Rs of different stakeholders as from interviews and questionnaires significantly raised.	•Awareness of the environmental impacts of improper management of municipal waste practices is generally limited. In addition, there is limited public awareness of the regulatory and institutional framework regarding POPs and hazardous chemicals in general.	***Target 52*** •Awareness raising materials (printed or broadcasted) on 3Rs of materials which, if wasted, can generate U-POPs and toxic substances, developed and published for the 3 municipalities of Mombasa, Kisumu and Nakuru. ***Target 53*** •At least 3 awareness raising workshops on 3Rs dedicated to the representatives of environmental authorities performed. ***Target 54*** •At least 3 awareness raising event for the public at large in the 3 regions of Mombasa, Nakuru and Kisumu carried out.
		4.1.2: Regulatory framework for the recovery of waste materials (glass, organic, plastic) and for licensing of the recovery activity at county and central levels improved to integrate SC	•Availability of improved regulatory framework which includes rules for 3Rs and preventing U-POPs emissions through cessation of open burning •Waste guidelines include SC provisions •Prioritization of plastic waste	•The Waste Management Regulations (2006) establish rules for the management of municipal waste, including provisions for licensing of collection, transportation, and running landfills. However, the enforcement of this regulation is low.	***Target 55*** •Waste management regulation and its enforcement improved to facilitate the reduce, recycle and recovery approach with special reference to waste which may generate toxic substances when burnt. ***Target 56*** •Special provisions facilitating communities to perform upstream collection of

Objective/ Component	Outcome	Output	Indicator	Baseline	Targets End of Project[4]
		requirements			recyclable waste and prevent unsafe dumping.
		4.1.3: Counties provided with training manuals, and technical assistance for the management of solid wastes.	•Availability of training manuals tailored for counties. •Number of staff from counties who received technical assistance.	•Inadequate training on 3Rs of specific municipal waste streams is carried out for municipality and local authorities in charge of municipal waste management at the counties.	***Target 57*** •At least 6 field training initiatives for communities and 3 training- for-trainer initiatives for municipalities in Mombasa, Kisumu and Nakuru, aimed at enhancing 3Rs of specific waste streams waste on the basis of the 3R approach performed. ***Target 58*** •At least 50 people trained for each training initiative.
	Outcome 4.2 Sound Management of solid waste in targeted municipalities implemented with the support of NGOs, with a reduction of unintentionally produced POPs from the burning of solid waste of 23 g I-TEQ/year (20 % of the current estimate of 247 g I-TEQ/year). Emergency plan to reduce exposure of population to harmful substances implemented.				
		4.2.1: Communities selected for demonstrating plans of actions for the reduction of solid waste open burning by increasing 3Rs of waste.	•Number of communities which are engaged in recycling of waste under the project.	•In Kenya there are a number of CBOs (Community Based Organizations) which are already operating in the field of waste recycling; however, the limit of these activities is that most of the waste is recycled only after being dumped in landfills, therefore the quality is very low.	***Target 59*** •At least one community for each site (Nairobi, Nakuru and Kisumu) is engaged and supported for conducting project activities. ***Target 60*** •Selected communities and their representatives identified and officially recognized under the project. ***Target 61*** •Memorandum of understanding and community driven projects on 3Rs with resources, list of activities and timeframe are agreed and signed by government and community representatives.
		4.2.2: Initiatives for reducing, reuse and recycle of waste and for composting, collection of compostable municipal waste for communities in three counties of Nairobi, Mombasa and Nakuru implemented with a PPP approach and supervised with the support of NGOs.	•Number of initiatives identified, properly designed and implemented on 3Rs. •Waste accounting system in place. Amount of organic compostable waste collected at the source (not at the landfill) and processed for recycling. •Amount of U-POPs releases prevented due to recycling activities and open burning avoidance.	•Currently, although a certain number of initiatives on waste recycling are being carried out by communities operating directly at the dumpsites, the recycling of compostable waste occurs mainly by processing paper or wood in briquettes for replacing coal in domestic stoves. These initiatives are in general not SC compliant and may imply exposure of people to U-POPs. Non-recyclables are open burnt by the communities which operate at landfill.	***Target 62*** •At least one initiative aimed at collecting and recycling organic or compostable waste which, if burned, would generate U-POPs is identified, designed and implemented for each of the three sites. ***Target 63*** •At least 500 tons of compostable material successfully collected from the source (not on the dumpsites) and re-used or re- cycled (waste to energy being not considered as suitable recycling activity), documented by a proper waste accounting system in place. ***Target 64*** •The recycling activity is organized at industrial scale with the support of industrial partner(s).

Objective/ Component	Outcome	Output	Indicator	Baseline	Targets End of Project[4]
		4.2.3: Local initiative for the re-use / recycling of other non-hazardous waste streams (i.e. plastics).	•Number of initiatives identified, properly designed and implemented on 3Rs of plastic waste. •Waste accounting system for recycled plastic in place.	•Currently, although a certain number of initiatives on waste recycling are being carried out by communities in all the landfills, the recycling occurs mainly by collecting plastic or other materials at the dumpsites and by selling it at very low cost to waste traders. The direct selling of artisanal articles made of recovered plastic is very ineffective. The issue of recycling of plastic bags is largely unanswered. Non-recyclable plastics are often open burnt by the communities which operate at landfill.	***Target 65*** •At least one initiative aimed at collecting and recycling plastic waste which, if burned, would generate U-POPs is identified, designed and implemented for each of the three sites. Amount of plastic collected at the source (not at the landfill) and processed for recycling. ***Target 66*** •Amount of U-POPs releases prevented due to recycling activities and open burning avoidance. ***Target 67*** •At least 30 tons/month of plastic successfully collected from the source (not on the dumpsites) and re-used or re-cycled, documented by a proper waste accounting system in place. ***Target 68*** •Domestic industrial stakeholders involved for facilitating the placing on the market of recovered plastic at industrial scale.
	4.3 Municipal waste disposal sites with adequate management practices (non-burn).				
		4.3.1: Prioritization of open-burning landfills to be closed and cleaned up, emergency plans including social and resettlement issues and cleanup plans for at least 3 landfills drafted.	•Prioritization of dumpsites in Kenya established. •Emergency plans for limiting the release of U-POPs and other toxic chemicals from dumpsite are available for at least 3 dumpsites. •Clean-up plans for 1 landfill are available.	•A number of clean- up and remediation plans have been drafted in the recent years for the Nairobi dumpsite; however, none of these plans have been implemented. •Remediation plans need to be designed involving communities living at the dumpsite to increase probability of implementation.	***Target 69*** •Dumpsites in the main Kenyan cities prioritized for intervention and emergency countermeasures based on health risk assessment, ecosystem risk assessment and socio-economic and criteria. ***Target 70*** •Emergency plan for three priority dumpsites, aimed at reducing release of U-POPs and other toxic chemicals, and at reducing exposure to POPs of the population, drafted. ***Target 71*** •At least one remediation plan for a priority dumpsite, based on the economy of waste recycling, drafted with the involvement of dumpsite communities.
		4.3.2: Emergency measures for reducing release of contaminants in the environment and the exposure of the population implemented in one high priority site.	•Number of people who benefit from reduction of exposure to chemicals released by the dumpsite. •Amount of the release reduction of U-POPs and other chemicals from implementation of emergency	•None of the clean- up plans drafted in the past was implemented. •No emergency measure for reduction of U- POPs release from open burning at dumpsites or reduction of people exposure to chemicals released by the dumpsite ever attempted.	***Target 72*** •The exposure of at least 5,000 people to chemicals released from dumpsites is halved, thanks to the adoption of emergency measures. ***Target 73*** •The release of at least 20 gTEq/yr. of PCDD/F avoided by means of emergency

Objective/ Component	Outcome	Output	Indicator	Baseline	Targets End of Project[4]
			measures.		measures directly aimed at preventing open burning of waste. ***Target 74*** •The release of at least 3 gTEq/yr. of PCDD/F avoided by means of activities implemented under output 4.2.3. aimed at preventing recyclable waste to enter dumpsites burning of waste.

The 'Project Document' is concise and encompasses the required details. It addresses the barriers towards implementation of the provisions in SC and for 'sound management of chemicals' in its different components and addresses the capacity strengthening needs into an appropriate list of expected outcomes along with the targeted outputs for each of the outcome of the project. The project objectives, different components of the project, the outcomes and outputs as mentioned in the Project Document are clear.

However, for the project objectives, when it comes to the indictors and the targets to be achieved, the level of ambition is a bit higher, particularly regarding the extent of mitigation in the release of UPOPs (Target 48, Targets 73, Target 74 in Table 7). This is explained further as below;

- For Target 48: As mentioned in the log-frame, the baseline emissions[5] are 19 gTEq/ Yr. The target for emission reduction is also 19 gTEq (Target 48). This is 100% reduction in the emissions. Complete elimination of the emissions of UPOPs from the medical waste is not feasible, firstly, because not all the facilities will be using the non-burn technologies and secondly as all the medical waste (after treatment) can't be recycled. Some of the material like bandages, gauges etc. would still need to be burned. It is recommended that the provisions be reviewed and revised (if required) (please see recommendation 1)
- For Target 73: The Outcome 4.2 requires reduction in the emissions of UPOPs of 20 gTEq/yr. by implementing the emergency measures. The project design has considered that implementation of emergency plan and fire prevention at one large landfill will allow for the reduction in the release of UPOPs to this extent. However, the project design has not provided for identification and implementation of the emergency measures to achieve this Target. Although, the project design has provided for capacity building and awareness creation etc. to facilitate implementation of the emergency measures, there are no provisions in the project budget to support implementation of the emergency measures. It is recommended (please see recommendation 2) that the provisions in the project design be made for identification and facilitating implementation of the emergency measures. It is further recommended that the possibilities of implementing the identified emergency measures (technology, sources of funds etc.) at one of the sites be examined and the figures for this Target by suitably revised (if required). In this regard, it is important to note that closure of a dumpsite does not lead to reduction in the release of UPOPs at an aggregate level, unless alternate methods for disposal of the waste are also implement alongside.
- For Target 74: The project is promoting recovery of recyclable materials (metals, plastics, glass, paper) at the source of generation of the 'solid waste'. In the baseline situation recovery of such inert materials was happening at the dumpsites (except for the paper) for the SW. Thus, in the baseline the inert components of the SW were not leading to emissions of UPOPs. Recovery of recyclable materials at the point of generation of waste (instead of the dumpsites) is good, however, it is not leading to any reduction in the emissions of UPOPs as there is no reduction in the quantum (except some waste paper) and composition of the material getting burned at the dumpsites. For working out the figure of 3g/TEq, it has been assumed (in the project document) that in the course of the project at least 6,000 tons per year of compostable waste, plus 360 tons per year of PET and LPDE plastic will be collected and

[5] For the HCFs, which are the beneficiaries under the project

recycled. It is recommended (please see recommendation 3) that the target for reduction in the emissions of UPOPs due to 3Rs be reviewed and revised (if required).

Apart from the issues mentioned above, the log-frame given in the project documents has a couple of issues which are detailed below:

- Outcome 1.2: Monitoring activities intensified and strengthened and PRTR database in place, has provided for the laboratory equipment and other such related activities. However, quantification and monitoring of the emissions of POPs and other hazardous chemicals is mostly done using the emission factors, mass balance methods, engineering calculations and activity rates etc. Thus, although strengthening of the capacity in the country to carry out laboratory operations is good, it is not contributing towards the overall objective of the project. It is recommended (please see recommendation 4) that the provision of Activities/Targets for Outcome 1.2 be reviewed and if required suitably modified.
- For the indicators for achievement of the 'Project Objectives', there is a mismatch between the indicators and the corresponding 'end of the project' targets
- The log-frame of the project has not provided the indicators at the level of Outcomes. The indicators have been provided at the level of Outputs. Further, for most of the cases the 'end of the project' targets for the indicators are in terms of the activities. It may be appreciated that implementation of the planned activities doesn't necessarily depict the achievement of the desired Output/Outcome.

5. FINDINGS: PROGRESS TOWARDS RESULTS

This chapter of the report provides the findings of the Mid-Term Review regarding progress made towards achievement of the results of the project in terms of different outcomes and outputs. Although, the project started immediately after signing of the project document, not much progress could be made in the initial period of project implementation as the 'human resources' for implementation of the project, could get mobilized much later.

As a part of MTR, a couple of recommendations has been made (in the previous chapter 4 of the report) for modifications in the results framework of the project. As these recommendations are still to be approved and formalized, they have not been considered while reviewing the progress towards achievements of the results. As per the set guidelines and the procedures the rating for the progress towards achievements needs to be done as per the approved (in this case the original indicators and targets provided in the 'Project Document') indicators and the corresponding targets.

During the MTR, review of progress towards results has been done in terms of indicators for different outcomes in the log-frame of the project as provided in the 'Project Document' and the corresponding set of Outputs (please see Table 6).

The assessment for 'progress towards attainments of results' has been done first for different Outcomes of the project, followed by that for the 'Project Objectives'. This is for the reason that the assessment regarding progress towards results for the 'Project Objectives has been done both in terms of the indicators for the 'Project Objectives' and in terms of the progress towards results for different Outcomes.

Mid-term review questions (see Annex B)

Progress towards results

- Review the log-frame indicators against progress made towards the end-of-project targets using the 'Progress Towards Results Matrix', with progress indicators for outcomes/outputs, indicating baseline and target levels, as well as current level and/or reported in PIR linked with ratings for each outcome.

Global environmental impacts

- Results in terms of contribution to sustainable development benefits, as well as global environmental benefits
- What are the remaining barriers to achieving the project objective in the remainder of the project?
- What are the aspects of the project that have already been successful and what are the ways in which the project can further expand these benefits?

5.1 Progress towards attainment of outcomes

This section of the report provides an overview of the progress towards results of different Outcomes of the project. In the Tables below, the column with 'Level at PIR' is based on the second PIR (draft PIR for the year 2019). Although, the Guidance for Conducting Mid-term Reviews of UNDP-Supported, GEF-Financed Projects specifies that the level at first PIR be reported, in the present case values of the second PIR has been used. This is considering that there was not much progress at the time of preparation of first PIR (for the year 2018) due to delayed start of the project implementation.

As the 'results framework' of the project has not provided the indicators at the level of Outcomes, the progress towards achievement of results has been assessed for different Outcomes in terms of the indictors and the targets for the set of outputs. It is important to note that in the present case the set of targets provided for the Outputs are in the form of activities, thus, the achievement of the targets for the Outcomes would not necessarily represent the achievement of the given Outcome of the project.

5.1.1 Progress towards results – Component 1

Table 7 below provides an overview of the progress towards achievement of results for different Outcomes of Component 1(Outcome 1.1 and Outcome 1.2) of the project. This is based on the progress towards results for different Output of Outcome 1.1 and the Outcome 1.2, as provided in Table 8.

Table 7: Progress towards results for Component 1[6]

Outcome	Status as per PIR[7]	Status at MTR	Rating at MTR
Outcome 1.1: Policies, strategies regulatory and policy framework integrating the provisions of streamlining chemicals management into development activities (specifically those of the Stockholm convention and the SAICM recommendations) adopted and institutional capacity on U-POPs and waste management enhanced.	**On Track**	Component 1 of the project pertains to capacity building of relevant ministries at the central level and the county governments where the pilot activities under the project are being carried out (Nairobi, Kisumu, Nakuru and Mombasa) and the NGOs/ CBOs. Further, under this component of the project, creation of a conducive regulatory and policy framework, along with the training of the relevant institutions for implementation of the SC and SAICM is envisaged. Under Outcome 1.1 of the Component 1, Policies, strategies regulatory and policy framework are to be integrated with provisions of streamlining chemicals management into development activities, thereby enhancing the institutional capacity on UPOPs and waste management. As can be seen from Table 8, some of the of the activities (Outputs/Targets) for achieving Outcome 1.1 has already been carried out. However, a number of activities (Outputs/Targets) are still to be carried out. All the pieces of legislation are all nearly ready. What is waiting is executive endorsement procedures not fundamental technical issue. A bit of catching up would need to be done to achieve the Outcome 1.1 by the end of the project.	The progress towards achievement of results for Outcome 1.1 has been rated as **Moderately Satisfactory**
Outcome 1.2 Monitoring activities intensified and strengthened and PRTR database in place.	**On Track**	Outcome 1.2 relates to intensification and strengthening of the monitoring activities for chemicals and creation of PRTR database. The work plans of the project for the years 2017, 2018 and 2019 has not included any activity for achieving the Targets for Outcome 1.2. However, the project has already initiated the efforts (prepared TOR for appointing a consultant) for some of the activities to achieve this outcome. However, there are issues (project design issues) with this Outcome (please see recommendation 4). Due to this reason the progress towards achievement against this Outcome has not been rated.	**Not Rated**

Table 8, gives the progress towards achievement of the Targets for different Outputs for Outcome 1.1 and Outcome 1.2. The progress towards achievement of targets for the Outputs, forms the basis for the ratings regarding the 'progress towards achievement' of results for the Outcomes.

Table 8: Status of Outputs for Indicators/Targets for Outcomes of Component 1

Output	Indicator	Target	Status as per PIR[8]	Assessment at MTR
Outcome 1.1				
1.1.1: Overall policy framework and	• Availability of a completed and	***Target 1*** • Gap analysis	Gap analysis was conducted and action plans for	A two-day workshop was held to find the

[6] The Table for the progress towards results as given in the TOR, has been modified to take care of the situation wherein the log-frame of the project does not provide the indicators, baseline situation and the targets at the Outcome level. The log-frame of the project has provided the indicators, baseline and the Targets at the Output level. Further, the Targets provided against the Outputs are the set of activities and doesn't necessarily depict the achievement of the Outcome.

[7] As Self-reported by the project team

[8] Self-reported by the project team

Output	Indicator	Target	Status as per PIR[8]	Assessment at MTR
specific regulatory measures covering environmentally sound management of chemicals in general and POPs in particular through chemicals life cycle management developed and implemented.	comprehensive gap analysis. • Availability of a nationally endorsed roadmap for improving the existing regulations. • Number of new or reviewed regulatory acts to take into account in a consistent manner the current provisions of the SC convention on POPs, with respect to the overall number of relevant regulatory norms to be reviewed identified in the gap analysis.	completed within 12 months from the project start. • A policy and legislation review roadmap approved within 24 months from project start.	implementation of the recommendations by relevant stakeholders have been put in place, and consultations and priority actions for various stakeholders are ongoing. Draft Chemicals Policy oriented towards making Kenya compliant with the SC prepared	gaps. The identified gaps were complied. Roadmap for chemicals management developed through a consultative workshop held in July 2018 Actions has been carried out as reported in the PIR **On Track**
		Target 2 The identified polices and legislation regulation/s or their associated norms are amended for compliance with the SC requirements.	Draft Chemicals Policy oriented towards making Kenya compliant with the SC Initial meetings to firm up the roadmap to sustainable management of chemicals in Kenya have been held - One stakeholders forum to develop a draft chemicals road map held in July 2018	Actions has been carried out as reported in the PIR **On Track**
1.1.2: Key institutions have knowledge and skills to formulate and implement necessary chemicals and waste environmental policies, consistent with sound chemicals management principles and obligations under international agreements	Availability of capacity building needs assessment report. Existence of a Training Institution on Chemical Management	***Target 3*** • Capacity building needs assessment for central and local institutions in charge of chemical management completed within 12 months from project start.	There has been an initial focus on the Health Care sector in particular, in terms of capacity building needs assessment. Procurement of a consultant to develop the training package is ongoing. The training to be rolled out by October 2019.	The project supported the consultancy for 'Institutional Needs Analysis for Chemicals and Waste Management in Kenya' – Oct 2017 **On Track**
		Target 4 • Training materials tailored to the Kenyan situation, developed on POPs management, POPs monitoring, chemical emergency response and 3R of waste.	Procurement of a consultant to develop the training package is ongoing. The training to be rolled out by October 2019. The tertiary institutions of learning have been identified as the training institutions on chemicals management. The project has engaged the University of Nairobi (UoN) and the Masinde Muliro University of Science and Technology (MMUST) in developing a curriculum - to ensure that the Sound Chemicals and Multilateral	TOR for the consultancy has been worked out for the Health Care Workers. Procurement process is underway. This activity is to be a follow up of the results of activities under Target 3 **Not on Track**

Output	Indicator	Target	Status as per PIR[8]	Assessment at MTR
			environmental agreements (MEAs) issues are included in the university curricular. The Water Resources Authority (WRA) has also been identified as having potential to train and certify those who may require shorter in- service training. Universities are consulting on the inclusion of multilateral environmental agreements (MEAs) in their courses within the next 2 academic years that starts in September 2019.	
		Target 5 • At least 2 Excellence Training Centers on chemicals management established at a main Academic Institution	The process of selection of the training centres has started and a baseline study of the competencies of the two universities (University of Nairobi (UoN) and Masinde Muliro University of Science & Technology (MMUST) targeted to host training centres on chemicals management has been initiated. In complement to this project, MMUST is undertaking a study to monitor environmental quantities of mercury within the Western region which is a gold mining belt. The Kenya Chemical Society (a professional body) is developing short courses on chemical management for its members. The course will cover the chemical life cycle and waste management	The project organised two workshops - Workshop for the national dialogue on integrating chemicals MEAs in research, monitoring and universities curricula -July, 2017. - Workshop on the role of universities in mainstreaming sound chemicals management in national development agenda - Oct 2017 No further action to achieve this could follow **Not on Track**
		Target 6 • At least 200 staff coming from all Kenyan counties and affiliated to governmental institutions, chemical industry and waste management companies selected and trained	PIR 2018 In the Health Sector itself: 6 master trainers (4 female and 2 male) were trained on HCWM and 67 Trainers of Trainers (39 male and 28 female) have been trained on HCWM. On Municipal waste management: 208 Kenya Military officers (188 male and 22 female) and 124 recyclers / composters in the four target project counties have received training on waste management. 2019	In accordance with Output 1.1.2, the training in this case was to be on regulations and policy aspects. The project design has provided for specific on HCW management and SW management, elsewhere A training workshop was organised for county directors of environment and environmental officers (44 participants) from Nairobi, Kisumu,

Output	Indicator	Target	Status as per PIR[8]	Assessment at MTR
			200 health officers from Mombasa, Kisumu and Nakuru, Nairobi counties from HCF selected as demonstration areas trained on HCWM, cessation of open burning of waste, waste separation	Mombasa and Nakuru counties on air quality regulations – Oct 2018 **Not on Track**
		Target 7 • At least 2 training cycles (totally 10 days each) performed during project implementation. Effectiveness of training measured by means of pre-training and post- training examination of the participants	40 Officers of Water Resources Authority (WRA) (19 males and 21 female) trained on monitoring POPs and the POPs guidelines to be used as curricular. 73 Health Care Workers (41 males and 32 female) from the 4 target project counties trained using the IRAT Tool and certified as Master Trainers (6) or Trainers of Trainers- ToTs (67). 208 Kenya Military officers (188 males and 22 female), as well as 124 recyclers/ composters, have received training on waste management. 40 university staff (29 males and 11 female) had a one-day training on POPs at MMUST. 30 university staff (17 male and 13 female) trained at the Egerton University in Njoro. Activity set for November 2019	Training in this case was required to be on 'management of chemicals' as per the requirement of MEAs. This was to be a follow up action after achievement of Target 5. **Not on Track**
		Target 8 Trainees who successfully pass post-training examination receive a certificate in Chemical management. An award for most successful trainees consisting in contracts on Chemical Management at key Kenyan Institutions established.	**Merged with Tr 7**	This was to be the follow up action after achievement of Target 7 **Not on Track**
1.1.3: Key institutions have incorporated sound management of chemicals and wastes, including POPs, in their activities.	Number of POPs units at local and central environmental authorities trained and established. Availability of guidance documents on POPs and chemical management for local and central authorities.	***Target 9*** • Guidance and procedures for the integration of POPs issues in: chemical management, environmental permitting, waste management are developed for the local and central	Lectures/topics covered for policy, legislation, HCWM, POPs guidelines on open-burning, and incineration on a compact disk (CD) were compiled and availed to trainers as standard reference documents. The usefulness/relevance of these materials were tested in the training sessions in Kisumu	Output 1.1.3 pertains to incorporation of sound management of chemicals, in the plans of key institutions. Whereas, the activities reported in the PIR are for training material for training on HCWM and SW

Output	Indicator	Target	Status as per PIR[8]	Assessment at MTR
	Availability of inspection reports.	environmental authorities.	and Mombasa, and were found to be appropriate, as they were responsive to and met the participants expectations established at the start of the trainings. Documents containing training material for CBOs shared electronically with TOTs for use in their training. Short courses being developed by Kenya Chemical Society to support training in chemicals and waste management. The courses are on open burning of waste, chemical labelling, storage and disposal among others	**Not on Track**
		Target 10 • Units on POPs management are trained and established in key local and central institutions.	25 members (18 males and 7 female) of the Kenya Association of Manufacturers (KAM) Nairobi Chapter trained on POPs management and promotion of responsible care within industry players. 30 (20 males and 10 female) members of KAM Nakuru Chapter engaged on the best waste management and disposal methods to promote a reduction in open burning. The need to encourage Public private partnerships (PPPs) in waste management was specifically discussed. 40 school officials (24 male and 16 female) from primary, secondary schools and universities in Kisumu were trained in May 2018 in Kisumu on the dangers of open burning of waste, waste management initiatives and starting of 3Rs initiatives in schools, in possible partnerships with Community-based Organisations. Activity set for February 2020	Output 1.1.3 pertains to incorporation of sound management of chemicals, in the plans of key institutions. Target 10 is for establishment of POPs management in key local and central institutions. Against this the PIR has reported training to the members of KAM **Not on Track**
		Target 11 At least 6 inspections / year on the fulfilment of POPs regulation in the country performed.	Sensitization sessions were held with stakeholders to create awareness on POPs regulations from which 98 Public Health Officers (PHOs), dentists and community oral health practitioners are now aware and knowledgeable on HCWM in general and the minimization of open burning.	The reporting in the PIR is not as per the Target 11. The activity of inspection can only be carried out, once the regulations are in place. As the regulations are were not in place at the time of MTR, the progress towards results for

Output	Indicator	Target	Status as per PIR[8]	Assessment at MTR
			2 training sessions have been held on the sources and types of chemical, cytotoxic and pharmaceutical wastes in the healthcare setting, risks associated with exposure of specific wastes and aspects of management of different streams of waste, the treatment and disposal methods to be employed. The sessions were the following: - Sensitization of dentists (29 males and 25 female) on Mercury and Lead poisoning, held on 19th and 21st March 2018. - Sensitization of Public Health Officers (29 males and 16 female) on Mercury and Lead poisoning on 22nd and 23rd March 2018.	Target 11 has not been rated. **Not Rated**
1.1.4: National coordinating meetings on POPs held regularly (4 times per year) without GEF financial support	Availability of the formal act for the establishment of the National Chemical Management Coordination Office (NCMCO). Number of coordination meetings held.	***Target 12*** • A National Chemical Management Coordination Office (NCMCO) established at the Ministry of Environment, composed by representatives of relevant Ministries.	Not Reported	The Implementation Plan for SAICM developed in 2011, recommended for the establishment of a National Chemical Management Coordination Committee (NCMCC). The TOR for the committee were also worked out at that time. The project has once again worked out the draft TOR for the NCMCC. The project organised a 'national chemicals coordination committee workshop' during Nov 2018, with the objective of formalise the TOR and other provisions **On Track**
		Target 13 Coordination Meetings of the National Chemical Management Coordination Office	Not Reported	The project organised one initial meeting of the NCMCO during Mar 2017 **On Track**
Outcome 1.2				
1.2.1: At least 70% of laboratory analyses in research and monitoring institutions required	Availability of a national plan for monitoring of POPs which establishes a market-based	***Target 14*** • Capacity building and equipment upgrading needs identified.	The project identified the National Environment Management Authority (NEMA) and Water Resources Authority's needs for specific	There have been 3 stakeholder engagements with universities and key institution that have

Output	Indicator	Target	Status as per PIR[8]	Assessment at MTR
to monitor the implementation of national policy on hazardous chemicals and wastes being carried out on a cost recovery basis	mechanism.		equipment for analysis of POPs and the project has planned to organise procurement by the next reporting period, to enhance technical capacity Procurement process for equipment (a sampling train) to be used by the National Environment Management Authority (NEMA) to sample air quality is underway and will be completed by September 2019	mapped out priorities and hotspots, training needs, change of university curricular, engagement with the chemical Society of Kenya, trainings for WRA on priority WHO chemicals, air quality monitoring initiated at NEMA **On Track**
		Target 15 National plan for environmental and industrial monitoring, which identifies POPs monitoring obligations for key industrial and waste management activities developed and implemented.	Industries that are central to POPs emissions (Cement factories, Export Processing Zone – in Athi River, near Nairobi) were visited in April 2018 and a joint stakeholder forum was held in Athi River to create awareness and highlight the need to put in place the appropriate waste disposal practices. The visited industries were involved in the identification and mapping of their waste streams; in addition, their waste disposal practices/plans were discussed. The Athi River Export Processing Zone is to become a targeted site for routine sampling and monitoring as a potential contaminated site. Activity planned for August 2020	No activity has been carried out to achieve this target. The work plans for the years 2017, 2018 and 2019 doesn't have any action for achievement of this Target **Not on Track**
		Target 16 • A financial mechanism for ensuring the sustainability of POPs laboratories based on incentives and environmental taxes established and piloted for at least one year.	ToR for the development of a POPs monitoring protocol were developed and the consultant to be retained in the next reporting period. The training of the laboratories technicians on POPs monitoring has been scheduled for December 2018. Additional work on the end-of-project target (accreditation, financial mechanism) is to be pursued in the next reporting periods. Procurement of consultant to facilitate the development of a POPs monitoring protocol ongoing Training of laboratories technicians delayed due to	No activity has been carried out to achieve this target. The work plans for the years 2017, 2018 and 2019 doesn't have any action for achievement of this Target **Not on Track**

Output	Indicator	Target	Status as per PIR[8]	Assessment at MTR
			operational issues but will be completed by December 2019.	
		Target 17 • Two key laboratories on POPs analysis accredited following ISO 17025 standards and associated accreditation schemes	**Not reported**	No activity has been carried out to achieve this target. The work plans for the years 2017, 2018 and 2019 doesn't have any action for achievement of this Target **Not on Track**
		Target 18 Up to 80 laboratories technicians and government staff trained on POPs monitoring related activities following international standards and requirements.	**Not reported**	Training to 30 trainees from WRA has already been carried out. More persons are to be trained during rest of the project. **On Track**
1.2.2: 70% of universities nationwide include issues of hazardous chemicals and wastes, risks and legislation, in their curriculum	Number of universities including curricula on chemical risk assessment and management of hazardous chemicals and hazardous waste.	***Target 19*** • University curricula for chemical risk assessment and management of hazardous chemical and hazardous waste adopted by at least 70% of training institution.	Local universities have been visited and discussions at department level held at University of Nairobi, Egerton University and Masinde Muliro University of Science & Technology on curriculum review to include Chemical and waste management as core courses offered at university level. The universities also encourage the students undertaking Masters and PhD in Chemistry to include POPs issues in their choice of research topics. The Kenya Military Academy has incorporated a unit that will be known as a resource on waste management, as part of courses on sustainable environmental management to be offered to the junior intake in their second year of study. The unit content is being reviewed and will be ready in the next reporting period (planned: October 2018). Departmental discussions at university level have been taking place and feedback is expected in quarter 3 of 2019.	(please see write up for Target 5 as well) The project organised two workshops - Workshop for the national dialogue on integrating chemicals MEAs in research, monitoring and universities curricula -July, 2017. - Workshop on the role of universities in mainstreaming sound chemicals management in national development agenda - Oct 2017 **Not on Track**
		Target 20 One cycle of curricula completed in at least 2 universities within the	The Kenya Military Academy to offer the new incorporated course to second year military	No activity either carried out or planned to achieve this Target

Output	Indicator	Target	Status as per PIR[8]	Assessment at MTR
		project timeframe.	trainees starting September 2019	**Not on Track**
1.2.3: PRTR Database and reporting system in place.	Regulatory tool for the implementation and enforcement of POPs / PTS reporting and PRTR established.	***Target 21*** • By the end of the project, a circular drafted and submitted to GoK for approval related to implementation and enforcement of POPs monitoring and PRTR system to ensure sustainability of the PRTR related	University of Nairobi is leading the stakeholders in developing the PRTR Database and reporting system. An initial assessment of capacity at the National Environment Management Authority (NEMA) and Water Resources Authority (WRA) which will be the primary data collectors and custodians, has been done. The ToRs on the operations of the PRTR database will be finalized by October 2018 40 Water Resources Authority officers (19 male and 21 female) were trained on sampling and analysis of certain parameters in the analysis of water that will be part of the PRTR in April 2018 in Nakuru. Institutional internal capacity assessment on the hosting of the PRTR done, institutions were assessed and the PRTR consultancy delayed to quarter 3 and 4 of 2019.	TOR for the consultancy has been finalized Procurement of the consultancy to be done **On Track**
		Target 22 • Demonstration of an Information Management System to support PRTR	The PRTR consultancy delayed to 2019. Institutional internal capacity assessment on the hosting of the PRTR done. Procurement of a consultant to guide the establishment of a PRTR is ongoing.	TOR for the consultancy has been finalized Procurement of the consultancy to be done **On Track**
		Target 23 A POPs/PTS database established to contain data related to industrial sources, and POPs contaminated sites in 2 Kenyan provinces, and all the country-wide available data on POPs environmental monitoring.	Activity delayed to late 2019 due to logistical and operational challenges	TOR for the consultancy has been finalized Procurement of the consultancy to be done **On Track**

5.1.2 Progress towards results – Component 2

Table 9 below provides an overview of the progress towards achievement of results for different Outcomes of Component 2 (Outcome 2.1 and Outcome 2.2) of the project. This is based on the progress towards results for different Output of Outcome 2.1 and the Outcome 2.2, as provided in Table 10.

Table 9: Progress towards results for Component 2

Outcome	Status as per PIR[9]	Status at MTR	MTR
Outcome 2.1 Personnel of hospital facilities and control authorities at central and county level have enough capacity guidance and equipment to manage healthcare waste in an Environmental Sound Manner	**On Track**	Component 2 of the project is focused on facilitating demonstration of BEP and BAT for treatment and disposal of the HCW in the HCFs. While Outcome 2.1 of Component 2 is focused on creation of conducive conditions (regulations and standards) for implementation of the BEP and BAT at the national level, Outcome 2.2 is focused on facilitating implementation of BAP and BAT at the selected HCFs. Most of the activities/indicators provided in the results frame-work for Output 2.1 are either being implemented and are planned. It is likely that by the end of the project the proposed regulations and standards would be in place.	Most of the activities planned are either been carried out or are planned. By the end of the project project regulations are expected to be in place. Accordingly, the progress towards results for this Outcome has been rated as **Satisfactory.**
Outcome 2.2 Implementation of BAT/BEP at selected hospital facilities successfully demonstrated and measured against the baseline	**On Track**	As mentioned above Output 2.2 of Component 2 of the project is focused on facilitating demonstration of BEP and BAT for treatment and disposal of the HCW in the selected HCFs. Facilitation is to be done by carryout baseline assessment, training of the staff of the HCFs, minimizing the waste stream, segregation of waste and introducing recycling activities etc. Most of the activities/indicators provided in the results frame-work for Output 2.2 are either being implemented or are planned. However, the impacts and effectiveness of such activities is not visible. For example, the staff of the HCFs are still not clear about the need and procedure for segregation of waste (in terms of different types of wastes e.g. different types of plastics, separation of needles from syringes) which are necessary for implementing BEP and BAT. Further, there is a need to increase the understanding amongst the staff regarding the possibilities to recycle some of the HCW (please see recommendation 5).	Most of the targets/outputs for this Outcome are expected to be completed by the end of the project. However, the effectiveness in terms of the Outputs in terms of the desired Outcome is missing, due to absence of the dissemination of the knowledge regarding the need to dispose of the treated waste by a non-burn method. The progress towards results has been rated as **Moderately Satisfactory.**

Table 10, gives the progress towards achievement of the Targets for different Outputs for Outcome 2.1 and Outcome 2.2. Although, ideally the progress towards achievement of targets for the Outputs, should form the basis for the ratings regarding the 'progress towards achievement' of results for the Outcomes, in the present case the achievement of the Outputs is not supporting the desired Outcome. Thus, in spite of the expectations regarding the achievement of the Outputs, the rating regarding the progress towards results for the Outcome is rated as 'Moderately Satisfactory'.

Table 10: Status of Outputs for Indicators/Targets for Outcomes of Component 2

Output	Indicator	Target	Status as per PIR[10]	Assessment at MTR
Outcome 2.1				
2.1.1: Procedures and guidelines for the assessment and implementation of hazardous waste management at healthcare	• Evidence that the guidelines for the Environmentally Sound Management of HCW, including rapid assessment based on the I-RAT tool, have been developed	***Target 24*** •Revision/development of HCWM guidelines based on the last edition of the WHO bluebook (tailored to various facility types) which include tool and procedures for rapid assessment of HCWM	Review of national HCWM guidelines has been completed The national HCWM guidelines reviewed by ministry of Health. Counties have adopted the HCWM guidelines and included activities in their County Integrated Development Plans(CIDP)	Report on the Review of the Kenya National Guidelines for Safe Management of Health Care Waste has been prepared **Target Achieved**

[9] As Self reported by the project team

[10] Self-reported by the project team

Output	Indicator	Target	Status as per PIR[10]	Assessment at MTR
facilities built on lessons and examples from the application of the I- RAT tool under the GEF4 /UNDP Global projects and on the WHO bluebook "Safe Management of Wastes from Health- care Activities" developed and adopted	and officially adopted.			
		Target 25 • The above guidelines are officially adopted by all the pre-selected HCFs.	The national HCWM guidelines reviewed by ministry of Health and printing delayed due to operational and logistical challenges, to begin before end of 2019. Counties have adopted the HCWM guidelines and included waste management and avoidance of burn methods in HCWM activities in their County Integrated Development Plans (CIDP)	Status as reported in the PIR **On Track**
2.1.2 A national healthcare waste handbook containing guidelines for HCWM drafted and adopted by the MOH, including introduction of non-mercury devices in the HCFs	•Availability of the healthcare waste management handbook and documentary evidence that it has been officially adopted. •Updated and reviewed Waste Regulations dating from 2006	***Target 26*** •Revision/development of emission and discharge standards on monitoring HCWM practices.	County of Nakuru developed a regulation for HCWM that is already in use. Legislation on HCWM for Mombasa county is in the process for enactment by the County Assembly. National Sustainable Waste Management Policy finalized. Stakeholders meeting on the National Sustainable Waste Management Policy held and gave strategic priorities. Draft Sustainable Waste Bill in the final stages awaiting gazette notification. In principle Nakuru has committed to non-burn management of will not apply burning to its waste except for special waste streams. Mombasa County has developed a Draft County Waste Policy and Bill awaiting public participation that is a mandatory step in the legislation development in Kenya. The project supported an activity at the Mombasa County	TOR for the consultancy has been finalized Procurement of the consultancy to be done **On Track**

Output	Indicator	Target	Status as per PIR[10]	Assessment at MTR
			to support the executives fast track the completion of the Draft Policy and Bill.	
		Target 27 •Development of technical regulations for HCWM equipment and supplies.	Draft Regulation on HCWM has been developed and enactment is in preparation. Specifications for a medical waste vehicle developed and submitted to the chief mechanical engineer for endorsement Public Private Partnership framework for healthcare waste developed	Activities are pending. As per the project team the activities are planned during Q3 and Q4 2019. However, such activities are not explicitly included in the Work Plan for 2019 **On Track**
		Target 28 •Development of standards on technologies for the processing and final disposal of HCW.	Delayed due to technical challenges TORs submitted to UNDP to recruit a consultant for the comparative studies.	TOR for the consultancy has been finalized (it is part of a larger consultancy for Target 26) Procurement of the consultancy to be done **On Track**
	•	***Target 29*** • Development of procedure and guidance for the replacement of mercury devices with non-mercury	Inventory of thermometers and Sphygmomanometer with mercury done for the four counties. No significant quantities in use in all the 13 HCFs. This Target/Activity was decided to be dropped.	As mentioned in the PIR report, this activity/Target has been dropped. It is recommended to formalise this, through the SC meeting (please see recommendation 6). **Achieved**
Outcome 2.2				
2.2.1: Hospital personnel at all levels trained on the implementation of the above procedures	•Number of staff from the project HCFs trained. •	***Target 30*** •All the staff of the HCF will receive training on HCWM.	100 health care personnel from 4 project facilities trained in Mombasa County. Now awaiting hands on training with procured waste management equipment	Activities carried out as reported in the PIR **On Track**
	•	***Target 31*** At least 200 staff from the project HCFs trained	6 Ministry of Health (MOH) staff (4 women and 2 men) trained in conducting Best Available Technology (BAT) and Best Environmental Practices (BEP) baseline assessments of the HCFs. An intensive 12-day training of trainers (ToT) workshop was conducted in cooperation with the "Reducing UPOPs and Mercury Releases from the Health Sector in Africa" regional project, to prepare teams of national experts comprised of government	Activities carried out as reported in the PIR **On Track**

Output	Indicator	Target	Status as per PIR[10]	Assessment at MTR
			personnel and local consultants selected by the countries. The teams underwent comprehensive training in non-incineration HCWM systems, policies, waste assessments, UNDP GEF and WHO tools, national planning, BAT/BEP guidelines, mercury phase-out, international standards, and other technical guidelines and well as project implementation related activities (Gantt charts, critical path analysis, budgeting, monitoring, etc.). Knowledge acquired from the training was used, in particular, in the identification of HCFs training needs. 20 personnel from Faith Based Healthcare Organization from Nairobi County trained on HCWM 19 personnel, County Health Management Teams (CHMT) training for Nakuru and Nairobi counties on planning and budgeting, waste management activities	
2.2.2: Baseline assessment of each healthcare facility based on the assessment procedures developed in 2.1.1 carried out, and waste management plans based on the baseline assessment level drafted and implemented	• Baseline assessments conducted for all project facilities	***Target 32*** •I-RATs conducted for each of the HCFs participating / benefitting from the project.	All the 13 selected facilities assessed and specific infrastructural and financial needs for each facility identified	Activities carried out at reported in the PIR **Target Achieved**
		Target 33 UPOPs releases before implementation of BAT/BEP determined for each project facility.	Facility-based survey completed for all the 13 target HCFs, including estimates of UPOPs emissions. In the above-mentioned facilities, selection of applicable BAT/BEP identified In Nakuru Provincial Hospital waste is no longer burnt in the open	As per project team this activity is planned for Q4 2019. However, this is not mentioned in the work plan for the year 2019 **On Track**
2.2.3: ESM management of healthcare waste (based	• All the project HCFs have introduced BEP in a satisfactory	***Target 34*** •Memoranda of Understanding (MoUs) signed with all project HCFs.	Meetings held with the policy makers in all the counties sensitized on the MOUs to be signed, and documents are	As per project team this activity is pending and will be carried out

Output	Indicator	Target	Status as per PIR[10]	Assessment at MTR
on WHO bluebook) implemented in 4 facilities in each county (12 facilities in total) including replacement of mercury devices with non-mercury	manner.		being drawn. The MOU signing is delayed and is expected later in 2019.	after achieving Target 32 and Target 33 **On Track**
		Target 35 •HCWM committees of all HCFs strengthened or established where missing. •HCWM policies, procedures and plans developed and implemented at each project HCF.	All the 13 HCFs have established committees that have regular quarterly planned meetings. Nakuru county has developed and enacted a bill on HCWM, while Kisumu and Mombasa counties have worked on draft Bills on HCWM that await enactment by the respective County Assemblies. HCFs currently implement the national HCWM policies and contribute to the national and county- level policy reviews. 2019 Nairobi, Nakuru and Nairobi selected HCF have formed committees for HCWM who have been trained according to I-Rat Nakuru County Waste Bill has been adopted and being enforced. It has adopted non burn technologies Mombasa county has developed a Draft Waste Policy and Bill and is subjecting it to public participation in September 2019	As per project team this activity is pending and will be carried out during Q3 and Q4 2019 **On Track**
		Target 36 •HCFs supported in minimizing waste streams, improving segregation and introducing recycling activities.	HCWM commodities and supplies have been procured - such as waste receivers and liner bags for demonstration on the segregation as per the training received. Trolleys for HCWM have been procured and awaiting ceremonial and awareness creation events distribution and creating awareness for BAT and BEP.	As per project team this activity is pending and will be carried out during Q3 and Q4 2019 **On Track**
		Target 37 •Each HCF evaluated to verify introduction of BEP practices.	BAT and BEP activities have started in the four counties. BAT and BEP being practiced in the four counties. Actions include; Segregation of waste at source, use of colour coded bins and liners, placing waste	This activity will be carried out after completion of Target 36 **On Track**

Output	Indicator	Target	Status as per PIR[10]	Assessment at MTR
			segregation charts at all points of waste generation.	
		Target 38 At least 2000 mercury devices replaced by non-mercury devices and safely stored pending disposal	Inventory of thermometers and Sphygmomanometer with mercury done for the four counties. No significant quantities found	Please see Target 29 This activity/Target has been dropped **On Track**
2.2.4: Final assessment of the healthcare facility to measure results achieved with the implementation of the ESM against baseline is carried out and estimates amount of U-POP releases avoided.	• Availability of final assessment report based on the HCWM guidance.	***Target 39*** •Final assessment conducted for each of the HCFs participating/ benefitting from the project with the assistance of properly trained project consultants.	The final assessment will be conducted once the BAT/BEP has been implemented in all the participating HCFs	Will be carried out after implementation of BAT/BEP in all the HCFs **On Track**
		Target 40 UPOPs after implementation of best practices in HCWM determined for each project facility.	The final assessment will be conducted once the BAT/BEP has been implemented in all the participating HCFs	Will be carried out after implementation of BAT/BEP in all the HCFs **On Track**

5.1.3 Progress towards results – Component 3

Table 11 below provides an overview of the progress towards achievement of results for different Outcomes of Component 3 (Outcome 3.1and Outcome 3.2) of the project. This is based on the progress towards results for different Output of Outcome 3.1 and the Outcome 3.2, as provided in Table 12.

Table 11: Progress towards results for Component 3

Outcome	Status as per PIR[11]	Status at MTR	Rating at MTR
Outcome 3.1 Feasibility analysis and procurement of ESM technologies for healthcare waste disposal completed	**On Track**	Component 3 of the project is a follow up of the Component 2 of the project, and is aimed at implementation of BEP and BAT at the HCFs. While doing so the project is to also make good use of some of the existing facilities for non-burn technologies (microwave, autoclave) at some of the HCFs. Also, the project is to upgrade the incinerators at some of the HCFs to minimise the release of UPOPs. Apart, from the use of existing facilities for non-burn technologies and up gradation of the incinerators, the project is to provide new equipment for establishment of non-burn technologies for treatment of HCW. The aim of Component 3 is to reduce the release of UPOPs of about 19gTEq/yr. Output 3.1 of Component 3, relates to the feasibility study in terms of technology type (microwave, autoclave), technical specifications, and cost effectiveness of the new non-burn technologies based HCW treatment facilities to be established under the project. Output 3.1 also includes the technical specification of the APCS for up-gradation of some of the existing	

[11] As Self-reported by the project team

Outcome	Status as per PIR[11]	Status at MTR	Rating at MTR
		incinerators. The project has already worked out the TOR for the consultants to be hired for carrying out the activities for achieving the Output 3.1. Accordingly, the progress towards achievement of results for Outcome 3.1 is rated as Satisfactory.	
Outcome 3.2 BAT/BEP technologies for the disposal of healthcare waste successfully established and demonstrated, with a potential reduction of U-POPs emissions in the order of 19gTeq/year	**On Track**	As mentioned above under Outcome 3.2, new non-burn technology based HCW management facilities would be created as some of the HCFs. The activities for achieving this Outcome can only be carried out after achievement of Outcome 3.1. Considering that activities for achieving 3.1 are yet to be initiated, further, considering the procurement and establishment of HCWs management facilities would be a time-consuming process, the Outcome 3.2 would be achieved only in case a no-cost extension to the project is provided (please see recommendation 6). As mentioned before (under Outcome 2.2), presently there is no understanding amongst the HCF staff regarding the need to segregate the waste, recycle the treated waste to the extent possible etc. to ensure that there is no release of UPOPs in the overall process of using non-burn technologies for HCW management. For the couple of HCFs where non-burn technologies are already in use (these non-burn facilities were created with support from the donor community in an earlier project), the final disposal of the shredded waste is carried out at the dumpsites (where it eventually gets burned) leading to release of UPOPs (please see recommendation 5). The project has targeted reduction of release of 19.0 gTEq/ yr. of UPOPs from the HCFs where the interventions on the ground are being supported by the project. This is against the baseline figure of release of 19.0 gTEq/ yr. from these HCFs. Thus, the project is targeted zero release of UPOPs due to treatment of HCW at the targeted HCFs. It is to be noted that this is not possible, firstly because not all the facilities will be using the non-burn technologies and secondly as all the medical waste (after treatment) can't be recycled. Some of the material like bandages, gauges etc. would still need to be burned (please see recommendation 1). As the targeted reduction in the release of UPOPs can't be achieved, the progress towards results for Outcome 3.2 is rated as Unsatisfactory. With the correction in the figures for targeted reduction in the release of UPOPs and implementation of the recommendations, the situation would change by the end of the project.	

Table 12, gives the progress towards achievement of the Targets for different Outputs for Outcome 3.1 and Outcome 3.2. The progress towards achievement of targets for the Outputs, forms the basis for the ratings regarding the 'progress towards achievement' of results for the Outcomes.

Table 12: Status of Outputs for Indicators/Targets for Outcomes of Component 3

Output	Indicator	Target	Status as per PIR[12]	Assessment at MTR
Outcome 3.1				

[12] Self reported by the project team

Output	Indicator	Target	Status as per PIR[12]	Assessment at MTR
3.1.1: Feasibility study and terms of reference for non-combustion or low-U-POPs emission technologies for healthcare waste disposal in selected hospitals or waste management facilities drafted.	•Availability of feasibility study. •Availability of cost-effectiveness analysis.	***Target 41*** •Cost-effectiveness and feasibility analysis of centralized treatment facilities in comparison with the current situation (one small treatment facility for each HCF) carried out.	TORs for a comparative study submitted to UNDP to procure an expert for the study. For Nairobi a study has been done, Japan ready to start a facility for Nairobi, EIA has been done At the Nakuru Provincial Hospital, a microwave has been installed as co-finance by the Ministry of Health under the Belgium Grant.	TOR for the consultancy has been finalized. Procurement of the consultancy to be done **On Track**
		Target 42 •Technical specifications for HCW treatment technologies drafted and approved.	The TORs for a comparative study submitted to UNDP to procure an expert for the study	Will be carried out after completion of Target 41 **On Track**
		Target 43 Technical specification for APCS and for the upgrading of a recent double chamber incinerator to be compliant with the SC drafted and approved.	TORs submitted to UNDP to recruit a consultant for the comparative studies.	TOR for the consultancy has been finalized. Procurement of the consultancy to be done **On Track**
Outcome 3.2				
3.2.1: Demonstration and performance assessment of the technologies in the selected facilities completed (at least 4 facilities or an overall amount of waste in the order of 630t/yr.)	•Number of non-incineration technologies that are operational. •Number of incinerators reviewed and upgraded to the SC BA T/BEP requirements, and operational. •Amount of U-POPs release prevented by means of implementation of better disposal practices	***Target 44*** •Non-incineration technologies procured, installed and tested servicing at least 11 HCFs.	The non-incineration technologies are a co-finance. In Nakuru Provincial Hospital microwave and autoclave are operational Housing for microwave under construction for Port Reitz Hospital in Mombasa county. One more microwave has been installed at Kisii level 5 hospital	The existing set of non-burn technology based HCW treatment were provided by an earlier grant program. The project has provision to create more non-burn technologies based HCW treatment facilities. This will be started after completion of Target 41 This activity is delayed, but the Target can be achieved with the extension of the timelines for the project implementation (please see recommendations 6 and 7) **On Track**
		Target 45 •Procurement of an initial set of HCWM related supplies for at least 12 HCFs. • Staff trained in the operation and maintenance of the technologies installed at the HCFs	Procurement of identified supplies for HCFs is underway and will be finalized in the next reporting period. Equipment operators have received an introductory training on operation and maintenance of non-incineration technologies.	The HCWM related supplies would support the initial operations of the non-burn treatment facilities at some of the existing HCFs and the HCWM facilities which would be created as part of the project. The procurement of the supplies is underway

Output	Indicator	Target	Status as per PIR[12]	Assessment at MTR
			More training shall be done once the equipment is in place.	
		Target 46 •HCFs supported in the implementation of their plans (including recycling activities) as well as monitoring practices.	Data collected by Facilities being consolidated to enable us know the exact state of emissions	This will be carried out after achievement of Target 44 **On Track**
		Target 47 Agreements between CTFs and PFs drafted and signed for each PFs served by a CTF.	Activity planned for 2020	This will be carried out after achievement of Target 44 **On Track**
3.2.2: Waste disposal activities of hospital facilities/programs are documented and their performance is evaluated to exemplify best practices in health-care waste management.	•Proof of Performance test reports available •Proof of performance tests in at least three non-combustion disposal facilities and at least one revamped incinerator available. •HCW hazardous waste manifests available for at least 630 t of HCW yearly.	***Target 48*** •The release of at least 19 gTEq /yr. of PCDD/F prevented thanks to the installation of BAT disposal technologies.	Procurement of monitoring equipment underway	As the monitoring of the emissions would need to be carried out based on the quantity of waste and the default release factors for UPOPs (as per SC toolkit), no monitoring equipment is needed (except the weighing scales) This activity would be carried out only after achievement of Target 44 The Target value of 19 gTEq / yr. of PCDD/F is unrealistic and needs to be revised (please see recommendation 6). Further, there are issues with the way of implementation of the non-burn technologies, wherein the final disposal of the treated waste is still done by way of burning. **Not on Track**
	•	***Target 49*** Proof of performance tests for at least three non-combustion disposal facilities and at least one revamped incinerator carried out.	Activity planned for 2020	This will be carried out after achievement of Target 44 **On Track**
3.2.3: Useful replication toolkits on how to implement best practices and techniques are developed	• Toolkit for replication of best practices made available.	***Target 50*** •A practical toolkit for the replication of CTFs or single-facility BAT/BEP in other counties is drafted and endorsed by the government.	Not undertaken yet. Implementation of this activity is planned for the final year of project implementation.	This activity will be carried out, once the good results of the project are available **On Track**

Output	Indicator	Target	Status as per PIR[12]	Assessment at MTR
		Target 51 The toolkit will be properly disseminated to relevant stakeholders.	Not undertaken yet. Implementation of this activity is planned for the final year of project implementation.	This activity will be carried out, once the good results of the project are available **On Track**

5.1.4 Progress towards results – Component 4

Table 13 below provides an overview of the progress towards achievement of results for different Outcomes of Component 4 (Outcome 4.1, Outcome 4.2 and Outcome 4.3) of the project. This is based on the progress towards results for different Output of Outcome 4.1, Outcome 4.2 and Outcome 4.3, as provided in Table 14.

Table 13: Progress towards results for Component 4

Outcome	Status as per PIR[13]	Status at MTR	Rating at MTR
Outcome 4.1 Awareness raising and capacity strengthening on ESM of solid waste ensured	**On Track**	Component 4 of the project is focused on reducing the release of UPOPs due to management of SW. Outcome 4.1 of Component 4 is to facilitate implementation of the measures to reduce the release of UPOPs by way of awareness creation, training, capacity building of stakeholders and regulations. Most of the activities/indicators provided in the results frame-work for Output 4.1 has already been implemented. The regulations regarding the management of SW are likely to be in place by the end of the project.	Regulations regarding the management of SW are likely to be in place by the end of the project. The progress towards achievement of results for Output 4.1 has been rated as **Satisfactory**
Outcome 4.2 Sound Management of solid waste in targeted municipalities implemented with the support of NGOs, and Emergency plan to reduce exposure of population to harmful substances implemented with a reduction of unintentionally produced POPs from the burning of solid waste of 23 gTEq/year (10 % of the current estimate of 247 g I-TEQ/year)	**On Track**	Outcome 4.2 of the project pertaining to reduction in the release of UPOPs due to management of SW, is focused on the engagement of communities already involved in the informal management of solid waste. This includes waste separation and recycling; development of small businesses based on waste recycling and composting. The reduction in the release of UPOPs is to be achieved by enhancing the "3R" economy and enabling municipalities to establish Public Private Partnerships (PPP) schemes with the support of NGOs that can at the same time reduce the waste flows being burnt, reduce poverty and provide an alternative opportunity for people living at the dumpsites. The targeted reduction in the release of UPOPs by these measures above is 3.0 gTEq/ yr. Another 20.0 gTEq/year of release of UPOPs is to be achieved by carrying out the interventions (emergency measures) at the dump sites (please see the next row for Outcome 4.3) In the baseline situation the inert parts (non decay-able like plastic, metals, glass, rubber) of the SW were not getting combusted at the dump sites as these were gets sorted out at the dumpsites. Thus, it is the collection of decay-able organic matter (food waste, paper etc.) and their disposal in ways other than dumping/burning which would lead to reduction in the release of UPOPs. The project has either implemented or is planning to implement the Targets/Activities mentioned in the results framework to achieve the Outcome 4.2. The project is supporting collection of waste paper at the source of generation and its recycling. The project is also supporting collection of some of the organic waste at the source of generation (markets, food outlets etc.) and its disposal by the CBOs by composting. However, the scale of such activities is	With the present scale of activities for collection of the waste at the source of generation and considering the fact that the inert part of the SW in the baseline case was not getting combusted at the dump sites, the targeted reduction of 3.0 gTEq/ yr. is not expected to be achieved, if corrective actions are not implemented. The progress towards results for Outcome 4.2 has been rated as **Moderately Satisfactory**

[13] As Self-reported by the project team

Outcome	Status as per PIR[13]	Status at MTR	Rating at MTR
		quite small, and is not expected to lead to the reduction in the release of the UPOPs up to the desired level. Considering the present scale of activities for collection of the waste at the source of generation and considering the fact that the inert part of the SW in the baseline case was not getting combusted at the dump sites, the targeted reduction of 3.0 gTEq/ yr. is unlikely to be achieved, unless corrective actions and recommendations are implemented (please see recommendation 3).	
Outcome 4.3 Municipal waste disposal sites with adequate management practices (non-burn)	**On Track**	Under Outcome 4.3 of the project, waste management practises ('non-burn technology' based emergency measures) are to be implemented at dumpsites to reduce the release of UPOPs due to burning of SW. The targeted reduction in the release of UPOPs due to the emergency measures is 20.0 gTEq/ yr. The project has facilitated closure of two existing dumpsites, but has not provided for the use of the non-burn technology as an alternative to the dumping of the SW. Due to which the SW which was earlier dumped at these dumpsites are now being diverted to other dumpsites or is not being collected. The project design has not provided for any emergency measures for reduction of release of emissions of UPOPs at the dumpsites (please see recommendation 2 as well). Also, there is no visibility regarding the funds which would be required for carrying out the emergency measures at the dumpsites. There is no action on this front by the project. With the present state of affairs, no achievement towards reduction in the release of UPOPs due to emergency measures is expected.	As implementation of any emergency measure to limit the release of UPOPs from the dumpsites (due to burning) is unlikely, there would not be any reduction in the release of UPOPs. No achievement towards reduction in the release of UPOPs due to emergency measures is expected. The progress towards achievement of results for Outcome 4.3 is rated as **Unsatisfactory**

Table 14, gives the progress towards achievement of the Targets for different Outputs for Outcome 4.1, Outcome 4.2 and Outcome 4.3. The progress towards achievement of targets for the Outputs, forms the basis for the ratings regarding the 'progress towards achievement' of results for the Outcomes. However, there is a possibility (as in case of Outcome 4.2) where the Outputs have been achieved, but the Outcomes are not achieved. This is largely due to the reason that the targets for reduction in the release of UPOPs is a bit more ambitious.

Table 14: Status of Outputs for Indicators/Targets for Outcomes of Component 4

Output	Indicator	Target	Status as per PIR[14]	Assessment at MTR
Outcome 4.1				
4.1.1: Awareness raising activities for the communities and the municipalities aimed at enhancing 3Rs of waste	• Level of awareness on 3Rs of different stakeholders as from interviews and questionnaires significantly raised.	***Target 52*** •Awareness raising materials (printed or broadcasted) on 3Rs of materials which, if wasted, can generate U-POPs and toxic substances, developed and published for the 3 municipalities of Mombasa, Kisumu and Nakuru.	Some awareness material developed and disseminated to stakeholders and partners during the planned project training workshops and meeting. Materials were also used for publicity and given out in two major events at the end of 2018 and in March 2019- Blue Economy Conference and UN Environment Assembly (UNEA). Content developed for Radio and TV but roll-out yet to start	Activities carried out as mentioned in the PIR **On Track**

[14] Self reported by the project team

Output	Indicator	Target	Status as per PIR[14]	Assessment at MTR
			as a dissemination plan and, strategy is being finalised.	
		Target 53 •At least 3 awareness raising workshops on 3Rs dedicated to the representatives of environmental authorities performed.	During 2018, the Green Belt Movement (NGO) conducted 1 workshop in Nairobi and 2 in Nakuru on 3Rs. Kenya Disaster Concern conducted 2 workshops for diverse stakeholders (teachers, laboratory technicians, recycling CBOs) on the 3Rs in Kisumu Mombasa county director of environment has successfully held 2 workshops on 3Rs and awareness on Open burning in Mombasa. The trained members of CBOs, teachers, military officers, waste collectors and recyclers have been engaged in the 3Rs awareness among their constituents During the year 2019, awareness was workshop held at the department of Defence in Nairobi for the Kenya military staff. A consultative dialogue for Coast region was held to discuss synergies between health and environment in Mombasa	Activities carried out as mentioned in the PIR **On Track**
		Target 54 At least 3 awareness raising event for the public at large in the 3 regions of Mombasa, Nakuru and Kisumu carried out.	During 2018 the project partners and the trained beneficiaries held 4 public awareness creation and sensitization events in all the selected counties. During 2019, 100 women and youth in Mombasa were informed of the entrepreneurship opportunities in waste management and the best approaches the local communities can undertake in waste management.	Activities carried out as mentioned in the PIR **On Track**
4.1.2: Regulatory framework for the recovery of waste materials (glass, organic, plastic) and for licensing of the recovery activity at county and central levels	•Availability of improved regulatory framework which includes rules for 3Rs and preventing U-POPs emissions through cessation of open burning •Waste guidelines include SC provisions •Prioritization of	***Target 55*** •Waste management regulation and its enforcement improved to facilitate the reduce, recycle and recovery approach with special reference to waste which may generate toxic substances when burnt.	The National Environment Management Authority (NEMA) leads the review of the national Air Quality Regulations and Waste Management Regulations. NEMA has also taken the lead on the enforcement of the Ban of Plastic Carry Bags that came into effect in August 2017.	Activities carried out as mentioned in the PIR **On Track**

Output	Indicator	Target	Status as per PIR[14]	Assessment at MTR
improved to integrate SC requirements	plastic waste		The National Solid Waste Management Strategy has been operationalized by NEMA and project is supporting its roll-out in the target project counties The National Waste Bill and policy developed and subjected to public participation. Kenya Association of Manufacturers (KAM) and the Ministry of Environment have signed an agreement on the PET bottles take-back-scheme.	
		Target 56 Special provisions facilitating communities to perform upstream collection of recyclable waste and prevent unsafe dumping.	The communities involved in recycling are supported to organize themselves into formal groups and efforts have been made to link them to key industry players who could take up the recycled materials and use them in their production. 4 CBOs to be engaged by the project has been identified and visited by the project team to discuss their priorities and align them to project outputs. Key priorities being diverting waste from dumpsites, recycling plastics and advocating for a cessation on open burning	Activities carried out as mentioned in the PIR **On Track**
4.1.3: Counties provided with training manuals, and technical assistance for the management of solid wastes.	•Availability of training manuals tailored for counties. • Number of staff from counties who received technical assistance.	***Target 57*** •At least 6 field training initiatives for communities and 3 training- for-trainer initiatives for municipalities in Mombasa, Kisumu and Nakuru, aimed at enhancing 3Rs of specific waste streams waste on the basis of the 3R approach performed.	During 2018, 228 (206 males and 23 female) TOTs trained and certified on the 3Rs initiatives. Communities in Nakuru are engaged in Composting, recycling paper and a youth group in Mombasa is collecting glass bottles for recycling. Partnerships with players in waste management established with promotion of recovery centres, linking waste collectors to recyclers and advocating for reduction in open burning In Mombasa the project is working with established CBOs, County government and private sector to train communities on waste management and to connect the collectors and the recyclers to create more value from the process of municipal	Activities carried out as mentioned in the PIR **On Track**

Output	Indicator	Target	Status as per PIR[14]	Assessment at MTR
			waste management and create awareness on environmentally sound solid waste management	
	•	***Target 58*** At least 50 people trained for each training initiative.	During 2018, 44 people (36 males and 18 female) were trained on 3Rs in March 2018 in Nakuru by the Green Belt Movement (GBM). 100 people (67 males and 33 female) were trained on compost by GBM in Nakuru and Nairobi. During 2019, youth and women were trained in Mombasa on waste management. The county committed to enhancement of waste collection and transportation system by introducing Zoning of operation areas and creation of linkages between waste collectors and recyclers to enhance symbiosis and interdependence hence waste reductions	Activities carried out as mentioned in the PIR **On Track**
Outcome 4.2				
4.2.1: Communities selected for demonstrating plans of actions for the reduction of solid waste open burning by increasing 3Rs of waste.	• Number of communities which are engaged in recycling of waste under the project.	***Target 59*** •At least one community for each site (Nairobi, Nakuru and Kisumu) is engaged and supported for conducting project activities.	During 2018, communities to be supported in Nakuru and Kisumu have been identified and engaged as recycling and composting ambassadors. Mombasa county created an inventory on waste streams and identified players in recycling of various streams. During 2019, Groups of CBOs applied to be involved in 3R to benefit from the project. They have been shortlisted	Activities carried out as mentioned in the PIR **On Track**
		Target 60 •Selected communities and their representatives identified and officially recognized under the project	During 2018, 3 composting communities identified in Nakuru county and engaged in sharing experiences with other communities. Selected CBOs also engaged in Kisumu and Mombasa counties. During 2019, Waste to Wealth network was established in Nakuru. The project developed a screening process to identify CBOs to engage and support	Activities carried out as mentioned in the PIR **On Track**

Output	Indicator	Target	Status as per PIR[14]	Assessment at MTR
		Target 61 Memorandum of understanding and community driven projects on 3Rs with resources, list of activities and timeframe are agreed and signed by government and community representatives.	Set for quarter 3 and 4 of 2019	Planned for Q4 2019 **On Track**
4.2.2: Initiatives for reducing, reuse and recycle of waste and for composting, collection of compostable municipal waste for communities in three counties of Nairobi, Mombasa and Nakuru implemented with a PPP approach and supervised with the support of NGOs.	•Number of initiatives identified, properly designed and implemented on 3Rs. •Waste accounting system in place. Amount of organic compostable waste collected at the source (not at the landfill) and processed for recycling. •Amount of U-POPs releases prevented due to recycling activities and open burning avoidance.	***Target 62*** •At least one initiative aimed at collecting and recycling organic or compostable waste which, if burned, would generate U-POPs is identified, designed and implemented for each of the three sites.	One such initiative has been launched: Kenya military officers have been trained on composting to reduce the amount of waste they subject to open burning. Plans to run pilot composting for waste generated within the Lanet Barracks in Nakuru County are underway. A CBO is Mombasa identified that has established a material recovery centre and piloting the recovery of materials for recycling. They recycle A CBO in Nakuru county identified, visited, assessed and currently engaged in resource recovery for recycling. One private company identified in Mombasa, Nairobi and Nakuru that are engaged in plastic waste recycling	This activity required an action at a larger scale (not at CBO level) to treat/recycle SW the county level by involving the private sector in PPP mode. Under pressure to find an effective way to deal with the SW the counties at there own are trying to engage private sector in PPP mode to deal with the SW. However, in the absence of any past experience there is a clear lack of understanding regarding the suitable PPP models for SW management. Please see recommendation 8 **Not on Track**
		Target 63 •At least 500 tons of compostable material successfully collected from the source (not on the dumpsites) and re-used or re- cycled (waste to energy being not considered as suitable recycling activity), documented by a proper waste accounting system in place.	Activity scheduled for quarter 3 and 4 of 2019	The units for the Target is not clear. It is guessed that it is 500 tons per day. There are no initiatives for this activity. It is linked to the activity/target 62. **Not on Track**
		Target 64 The recycling activity is organized at industrial scale with the support of industrial partner(s).	Kenya Association of Manufacturers have been brought on board in Nairobi and Nakuru and are currently advocating for responsible care to foster recycling. Private business entity in Mombasa, Nakuru and Nairobi identified and ways of engagement are being explored	Activity planned for Q4 2019 **On Track**

Output	Indicator	Target	Status as per PIR[14]	Assessment at MTR
4.2.3: Local initiative for the re-use / recycling of other non-hazardous waste streams (i.e. plastics).	•Number of initiatives identified, properly designed and implemented on 3Rs of plastic waste. •Waste accounting system for recycled plastic in place.	***Target 65*** •At least one initiative aimed at collecting and recycling plastic waste which, if burned, would generate U-POPs is identified, designed and implemented for each of the three sites. Amount of plastic collected at the source (not at the landfill) and processed for recycling.	One such initiative has been launched: Kenya military officers have been trained on composting to reduce the amount of waste they subject to open burning. Plans to run pilot composting for waste generated within the Lanet Barracks in Nakuru County are underway. A CBO is Mombasa identified that has established a material recovery centre and piloting the recovery of materials for recycling. They recycle A CBO in Nakuru county identified, visited, assessed and currently engaged in resource recovery for recycling.	Activity planned for Q4 2019 **On Track**
	•	***Target 66*** •Amount of U-POPs releases prevented due to recycling activities and open burning avoidance.	Activity scheduled for 2020	This will be assessed towards the end of the project **On Track**
		Target 67 •At least 30 tons/month of plastic successfully collected from the source (not on the dumpsites) and re-used or re-cycled, documented by a proper waste accounting system in place.	The project supported the ban on single use carrier (plastic) bags in Kenya. This translated to about 6% reduction of solid waste in Nairobi or at least 36 tons a month. The promotion and establishment of a waste accounting system is set for 2019, year 3 of the project.	This will be assessed towards the end of the project **On Track**
		Target 68 Domestic industrial stakeholders involved for facilitating the placing on the market of recovered plastic at industrial scale.	Activity scheduled for 2020	Activity planned for 2020 **On Track**
Outcome 4.3				
4.3.1: Prioritization of open-burning landfills to be closed and cleaned up, emergency plans including social and resettlement issues and cleanup plans for at least 3 landfills drafted.	•Prioritization of dumpsites in Kenya established. •Emergency plans for limiting the release of U-POPs and other toxic chemicals from dumpsite are available for at least 3 dumpsites. •Clean-up plans for 1 landfill are available.	***Target 69*** •Dumpsites in the main Kenyan cities prioritized for intervention and emergency countermeasures based on health risk assessment, ecosystem risk assessment and socio-economic and criteria.	Mapping of Dandora dumpsite to establish a green fort in partnership with Kenya Defence Forces will be completed by end of 2018. In the Kisumu county, a need for a weigh bridge at the entrance of Kachoki dumpsite has been identified and its procurement will be supported. Kibarani dumpsite in Mombasa County was been decommissioned and waste been dumped at Mwakirunge. The county of Mombasa has zoned waste collection and constructing reclamation	The project design has not provided for any emergency measures for reduction of release of emissions of UPOPs at the dumpsites. Also, there is no visibility regarding the availability of funds for carrying out this activity. **Not on Track**

Output	Indicator	Target	Status as per PIR[14]	Assessment at MTR
			centres in the zones to promote recycling. Inert waste has been moved from kachok dumpsite to Kajulu. Waste management has been devolved to sub county level	
		Target 70 •Emergency plan for three priority dumpsites, aimed at reducing release of U-POPs and other toxic chemicals, and at reducing exposure to POPs of the population, drafted.	Nakuru and Mombasa county are having internal discussions on the scope of the emergency plans for dumpsites that the project can support	The project design has not provided for any emergency measures for reduction of release of emissions of UPOPs at the dumpsites. Also, there is no visibility regarding the availability of funds for carrying out this activity. **Not on Track**
		Target 71 At least one remediation plan for a priority dumpsite, based on the economy of waste recycling, drafted with the involvement of dumpsite communities.	Each of the counties is addressing either closure or relocation of dumpsites. It started with GIS, The Kachok dumpsite in Kisumu county cleaned up by County of Kisumu, Kibarani dumpsite cleaned up NEMA and Mombasa county. More activities under this outcome scheduled for quarter 3 and 4 of 2019	The project design has not provided for any emergency measures for reduction of release of emissions of UPOPs at the dumpsites. Also, there is no visibility regarding the availability of funds for carrying out this activity. **Not on Track**
4.3.2: Emergency measures for reducing release of contaminants in the environment and the exposure of the population implemented in one high priority site.	•Number of people who benefit from reduction of exposure to chemicals released by the dumpsite. •Amount of the release reduction of U-POPs and other chemicals from implementation of emergency measures.	***Target 72*** •The exposure of at least 5,000 people to chemicals released from dumpsites is halved, thanks to the adoption of emergency measures.	Since Kibarani site was closed, Mwakirunge was opened but not licensed yet. The PMU and Mombasa county agreed to address the issue when NEMA licenses the site. As such emergency response measures are set for 2020 for Mwakirunge. Gioto site in Nakuru County is the second site where emergency measures will be carried out. The county of Nakuru is committed to ensure no open burning, In addition it has drafted plans for emergency measure to stop open burning.	The project has facilitated closure of two existing dumpsites, but has not provided for the use of the non-burn technology as an alternative to the dumping of the SW. Due to which the SW which was earlier dumped at these dumpsites are now getting diverted to other dumpsites (and getting burned). The project design has not provided for any emergency measures for reduction of release of emissions of UPOPs at the dumpsites. Also, there is no visibility regarding the funds which would be required for carrying out the emergency measures at the dumpsites. With the present state of affairs, no achievement for against this Target is expected. **Not on Track**
		Target 73 The release of at least 20 gTEq/yr. of PCDD/F avoided by means of	The ban of plastic carrier bags removed approximately 5% of waste or at least 1gTEq/yr.'	The project has facilitated closure of two existing dumpsites, but has not provided for the use of the

Output	Indicator	Target	Status as per PIR[14]	Assessment at MTR
		emergency measures directly aimed at preventing open burning of waste.	Closure of Kibarani stopped reduction of at least 50% in a large landfill. This represents some 8gTEg/yr. Potential for replication in Mwakirunge after it is licensed which represents the demonstrated capacity in 4 years More activities scheduled for quarter 4 of 2019	non-burn technology as an alternative to the dumping of the SW. Due to which the SW which was earlier dumped at these dumpsites are now getting diverted to other dumpsites or is not being collected or is being burned illegally. The project design has not provided for any emergency measures for reduction of release of emissions of UPOPs at the dumpsites (please see recommendation 2 as well). Also, there is no visibility regarding the funds which would be required for carrying out the emergency measures at the dumpsites. With the present state of affairs, no achievement towards reduction in the release of UPOPs due to emergency measures is expected. **Not on Track**
		Target 74 The release of at least 3 gTEq/yr. of PCDD/F avoided by means of activities implemented under output 4.2.3. aimed at preventing recyclable waste to enter dumpsites burning of waste.	It is estimated that actions at Dandora dumpsite, and sites in Nairobi and multiple sites in Nakuru county have increases the amount of recycled material as more CBOS are now conscious of the support given by the county. This reduces at least 1gTEq/yr. of PCDD. In its 2019 Financial Bill, the Government is going to make waste recycling tax exempt. This has a potential to reduce 1gTEq/yr. of PCDD	It is to be noted that in the baseline situation the inert parts (non-decayable like plastic, metals, glass, rubber) of the SW were not getting combusted at the dump sites as these were gets sorted out at the dumpsites. Thus, it is the collection of decay-able organic matter (food waste, paper etc.) and their disposal in ways other than dumping/burning which would lead to reduction in the release of UPOPs. The project is supporting collection of waste paper at the source of generation and its recycling. The project is also supporting collection of some of the organic waste at the source of generation (markets, food outlets etc.) and its disposal by the CBOs by composting. However, the scale of such activities is quite small, and is not expected to lead to the reduction in the release of the UPOPs up to the desired level, unless the corrective

Output	Indicator	Target	Status as per PIR[14]	Assessment at MTR
				actions/recommendations are implemented. **Not on Track**

5.1.5 Progress towards results – Project Objectives

In the above paragraphs, progress towards 'achievement of results' for different outcomes of the project were presented. In view of the progress made towards achievement of Targets of different outputs and outcomes of the project, an assessment regarding progress made towards achievement of the objectives of the project is presented in this part of the report.

The progress towards achievement of the project objectives has been done both in terms of the indictors and Targets for project objectives as provided in the log-frame and in terms of the progress towards achievement of the results for different Outcomes of the project as discussed in the above paragraphs. Table 15 below provides the details regarding the project Objectives, the set of Indicators and the Targets.

Table 15: Project Objective, Indicators and Targets (as per Project Document)

Indicator	Targets End of Project[15]
Project Objective: Reduction of the releases of U-POPs and other substances of concern and of the related health risk through the implementation of ESM of municipal and healthcare waste and of an integrated institutional and regulatory framework covering management and reporting of POPs.	
Indicator 1 • Existence of a SC compliant institutional and regulatory framework covering management and reporting of POPs.	***Target A*** • Guidelines for relevant institutions on how to streamline chemicals management into their policies, strategies and action plans ***Target B*** • Updated pieces of relevant legislation ***Target C*** • Review of the HCWM guidelines
Indicator 2 • Amount of U-POPs releases in the environment from HCW disposal avoided.	***Target D*** • Selection of health care facilities that can be used to demonstrate environmentally sound management of HCW ***Target E*** • At least 50% of HCW is disposed in ESM
Indicator 3 • Amount of U-POPs release in the environment from municipal waste disposal avoided.	***Target F*** • 30% of Municipal waste recycled through recycle, reuse and recovery methods

Table 16: Progress towards results: Project Objectives

Indicator	End of the Project Target[16]	Level at PIR[17]	Status and rating at MTR
Indicator 1 Existence of a SC compliant institutional and regulatory	*Target A* Guidelines for relevant institutions on	• Chemical Policy been finalized by technical committee now awaits national wide stakeholder validation forum as required by law.	There is sufficient progress towards achievement of the Target A of the project objectives.

[15] The numbering of the Targets has been done at MTR for easy reference

[16] Targets as per the Results Framework of the project provided in the 'Project Document'

[17] Self assessment by the project team

framework covering management and reporting of POPs.	how to streamline chemicals management into their policies, strategies and action plans	• Recommendations of the Institutional Needs study consultancy on Institutional Strengthening done in 2017 are being addressed • Key Output is that the Public Service Commission has accepted the establishment of chemicals and Waste Department in the ME&F • Action Plan for Mercury-free processing in Artisanal and Small Scale Gold Mining being developed up to the 1st Draft Report for Stakeholder validation and backstopping support to UNDP Country office in developing of the full scale GEF Gold Child Project to its signing by National Treasury • Activities to address mercury in products have been addressed • Three Forums organized for university to mainstream sound chemicals management i.e. 50% of anticipated activity. • Staff in key Institutions engaged in chemicals management fully aware of their responsibilities and obligations 50% in mainstreaming chemicals management into their institutions policies and strategies 80% done on this component • Inter-ministerial TORs on sound chemicals management developed and shared with all relevant stakeholders. Key issues addressed by the TORs include regular meetings, (4times a year), formation of committee and its scope and responsibilities of each sector. This activity is 80% done as it is awaiting gazette notification of chemicals policy	**The progress towards results for Target A is rated as Satisfactory**
	Target B Updated pieces of relevant legislation	• Minamata Convention ratification by Kenya in its final stages. • The Air Quality Regulations now in force since 2014. It criminalizes open burning of waste. Training of 44 government officers on developing county by-laws to control the open burning of waste in dumpsites and in waste collection system was conducted on 8-9 October 2018 • The Kenya National Implementation Plan (NIP) 2014 for Stockholm Convention is being updated to reflect decisions of the Stockholm Convention (SC) parties from COPs 8 and 9. • Additional administrative requirements for the ratification of Minamata Convention on Mercury were made. The request for ratification is being resubmitted.	There is sufficient progress towards achievement of the Target B of the project objectives. **The progress towards results for Target B is rated as Satisfactory**
	Target C Review of the HCWM guidelines	• Draft Chemical Regulations on developed and subjected to stakeholders for validation. • They are SC compliant as they provide institutional and regulatory framework covering management and reporting of POPs gazette notification.	There is sufficient progress towards achievement of the Target C of the project objectives. **The progress towards results for Target C is rated as Satisfactory**
Indicator 2 Amount of U-POPs releases in the environment from HCW disposal avoided.	*Target D* Selection of health care facilities that can be used to demonstrate environmentally sound management of HCW	• Priorities and current state of the health care waste management (HCWM) needs of the 13 Health Care Facilities participating in the project documented. • Tenders for the partial supply of the health care waste commodities documented for the 13 facilities have been issued. The commodities include: Bin liners, weighing, scales, trolleys, waste bins	Target D of the project objectives has already been achieved. **The progress towards results for Target D is rated as Satisfactory**

	Target E At least 50% of HCW is disposed in ESM	• Nakuru and Mombasa counties installed Counterpart procurement of equipment they had committed as co-finance to the project. These includes construction of housing for non-burn technologies. • Nakuru Provincial General Hospital has since banned open burning evident during the development of project document thus Minimizing 30% of HCW which is now disposed in ESM. • Due to management actions at least 10% of HCW is now disposed in ESM • Ministry of Health installed Non- burn technologies equipment they had committed as a co-finance to the project. These include: microwaves (4 in total) installed; at the Kenyatta National Hospital, Nakuru Provincial General Hospital, Moi Teaching and Referral Hospital and Kisii Level-5 Hospital. At the Mombasa • Provincial General Hospital, Lamu and Kenyatta National Hospital the Ministry have received and installed autoclaves (3 in total). • The procurement of equipment for environmentally sound management of health care waste, identified by the project for the respective 13 health care facilities, is ongoing. These include: colour coded bins and liners, weighing scales and sharp boxes.	With the present way of using the non-burn technologies for treatment of HCW, there won't be any reduction in the releases of UPOPs. This is because presently after treatment of the HCW in the autoclave/microwave, the treated waste is being finally disposed of at the dumpsites (where it gets burned) Corrective actions have been recommended as part of this MTR (please see recommendation 1) **Not on Track**
Indicator 3 Amount of U-POPs release in the environment from municipal waste disposal avoided.	*Target F* 30% of Municipal waste recycled through recycle, reuse and recovery methods	• The project has identified 4 CBOs engaged in 3Rs to be supported and capacity built. • Review of carrier bags Made to include more plastic waste • The Ministry of Environment and Forestry and selected partners that handle in polyethylene terephthalate (PET) bottles got into an agreement for the development of a take back policy for PET bottles. • An agreement between the Ministry and partners in PET bottles has been put in place • Sustainable Waste Management Regulations policy 2019 was validated by stakeholders on19 May 2019. It provides the cessation of open burning waste while promoting the use of 3Rs in the management of solid waste. • Kibarani which was the largest dumpsite in Mombasa City was decommissioned on Jul 30, 2018 and waste is now being transferred to Mwakirunge in Mombasa. Further environmental impact assessment is ongoing at Kibarani and the UPOPs project is supporting the county to monitor UPOPs and toxic chemicals at the rehabilitated part the county has developed a request to install water pumping equipment for the prevention of spontaneous open burning of waste in line with minimizing emissions sites • Out of the many engagements on awareness held in Kisumu county the county authorities decided not to use Kachok anymore and closed it. Inert Waste at the Kachok Dumpsite in Kisumu City has been moved to Kajulu. A field visit was made by the project to the new site. Action is being develop to ensure OBW is not transferred to this new site • The project has integrated Geographic Information Systems (GIS) and Global Positioning Systems (GPS) in Kisumu and Nakuru Counties to map solid waste management: a data base on geographic locations and collection routes for solid waste in over 30 sites. The data is essential in eradication of open dumpsite and future	Even if this target is achieved, there would not be any appreciable decrease in the release of UPOPs due to treatment of SW. This is because about 32% of the waste is non-decay-able (glass, metal, plastic bottles) and in the baseline case these were being recovered at the dumpsite (not burned). Reduction in the release of UPOPs would be achieved only if the organic material is recovered and disposed of by using alternate technologies (e.g. composting). Although, the project is promoting the composting of the organic matter, the scale of operations is very small, activities being carried out by CBOs in their backyards). **Not on Track**

		siting of collection sites to ensure an effective integrated waste management system in the two counties.	

The stated objective of the project is "Reduction of the release of U-POPs and other substances of concern and the related health risks, through the implementation of environmentally sound management of municipal and healthcare wastes and of an integrated institutional and regulatory framework covering management of and reporting of POPs. "Accordingly, the project design has components / activities which are specific either to the 'Sound Management of Chemicals' or 'Reduction of UPOPs emissions due to HCW' or 'Reduction in the UPOPs emissions due to SW'

It is targeted that by the end of the project there would be increased level of awareness/capacity, regulatory framework and laboratory services for 'sound management of chemicals'; reduction in the emissions of UPOPs due to HCW by 19 gTEq/ yr.; disposal of minimum 50% of the HCW in a ESM; reduction in the emission of 20.0 gTEq/ yr. due to emergency measures at dumpsites; reduction in the emission of UPOPs by 3.0 gTEq/ yr. due to 3R of collected (metals, plastics, glass, paper, organic matter) at the source of generation.

The project is implementing (or has planned to implement) most of the activities/targets mentioned in the result frame-work of the project. In spite of this, due to a number of reasons, presently, the progress towards achievement of most of the above-mentioned expected results by the end of the project is likely (unless corrective actions are undertaken). For example;

- The project design has not provided for any emergency measures for reduction of release of emissions of UPOPs at the dumpsites (please see recommendation 2 as well). There is no action on this front by the project. Thus, with the present state of affairs, no achievement towards reduction in the release of UPOPs due to emergency measures is expected.
- Considering the present scale of activities for collection of the waste at the source of generation and considering the fact that the inert part of the SW in the baseline case was not getting combusted at the dump sites, the targeted reduction of 3.0 gTEq/ yr. is not expected to be achieved, if corrective actions are not implemented (please see recommendation 3)
- Although, the project is promoting the use of autoclaves and microwaves for treatment of HCW, the material after such treatment is getting finally disposed of at the dumpsites (where it eventually gets burned), thus, there is no reduction in the release of UPOPs (please see recommendation 5).

It is expected that by the end of the project the regulatory framework for management of chemicals and UPOPs would be in place and there will be increased level of awareness/ capacity amongst the stakeholders for management of the chemicals. Considering this, the progress towards achievement of 'project objectives' has been rated as **Moderately Satisfactory**, even though significant shortfalls towards achievement of reduction in the release of UPOPs is expected.

5.2 Global environmental and other impacts

Mid-term review questions (see Annex B)

- **Global environmental impacts**
- Results in terms of contribution to sustainable development benefits, as well as global environmental benefits
- What are the remaining barriers to achieving the project objective in the remainder of the project?
- What are the aspects of the project that have already been successful and what are the ways in which the project can further expand these benefits?

At the time of its design, the project had projected significant global environmental benefits due to reduction in the release UPOPs, due to treatment/disposal of SW and the HCW. While the project is expected to effectively remove the institutional, regulatory and policy related barriers towards achieving this global environmental benefit, some of the barriers are still likely to remain (unless addressed specifically). These

barriers would hamper the reduction in the release of UPOPs by the project. Some of the major remaining barriers towards achievement of the reduction in the release of UPOPs are;

- Lack of understanding regarding the need to dispose of the treated HCW (using non-burn technologies), either by recycling or by permanent storage. Related to this is the barrier regarding the understanding of the need to segregate the waste in term of type of waste (not in terms of the category of hazard of the waste, but in terms of plastics, paper etc.). One of the related aspects is the need to separate the sharps (e.g. needle from the syringes etc.) at the point of generation of waste. Despite the training of the government officials from the health care sector and health care providers, this important requirement for using effectively using the non-burn technologies for waste treatment did not became part of the common knowledge. It is important to note that some of the HCW treatment facilities based on non-burn technologies were created in some of the hospitals (as a part of the project which was implemented just before the present GEF project), still there is a lack of understanding on these aspects. MTR is recommending specific action points to remove these barriers (please see recommendation 5)
- Lack of financial resources to carry out the emergency measures at the dumpsites to reduce the release of UPOPs due to SW. There is no possibility of addressing this barrier during the implementation timelines of the project. Particularly considering that the implementation of the emergency measures would require a recurring expense, sustainability of such efforts is also doubtful.
- Lack of knowledge regarding the suitable PPP models for treatment of SW by the private sector. Particularly the models that would be best suited, given the situation of Kenya. The MTR has recommended dedicated efforts for removal of this barrier (please see recommendation 8).

6. FINDINGS: PROJECT IMPLEMENTATION AND ADAPTIVE MANAGEMENT

This Chapter describes the appropriateness and functioning of project management and administration, work planning and monitoring and evaluation. First section of the chapter provides the details of the adaptive management and planning. The second section reviews relations with stakeholders, while the Chapter ends with an overview of planned and realised budget expenditures and co-financing.

6.1 Adaptive management and planning; monitoring & evaluation

Mid-term review questions (see Annex B)

- *Management:* Appropriateness of the institutional arrangement and whether there was adequate commitment to the project? Review overall effectiveness of project management as outlined in the Project Document. Have changes been made and are they effective? Are responsibilities and reporting lines clear? Is decision- making transparent and undertaken in a timely manner? Recommend areas for improvement; Review the quality of execution of the Executing Agency/Implementing Partner(s) and recommend areas for improvement; Review the quality of support provided by the GEF Partner Agency (UNDP) and recommend areas for improvement
- *Work planning*: Review any delays in project start-up and implementation, identify the causes and examine if they have been resolved; Are work-planning processes result-based? If not, suggest ways to re-orientate work planning to focus on results? Examine the use of the project's results framework/log frame as a management tool and review any changes made to it since project start.
- *Reporting:* Assess how adaptive management changes have been reported by the project management and shared with the Project Board; Assess how well the Project Team and partners undertake and fulfil GEF reporting requirements (i.e. how have they addressed poorly-rated PIRs, if applicable?); Assess how lessons derived from the adaptive management process have been documented, shared with key partners and internalised by partners.
- *Communications:* Review internal project communication with stakeholders: Is communication regular and effective? Are there any key stakeholders left out of communication? Are there feedback mechanisms when communication is received? Does this communication with stakeholders contribute to their awareness of project outcomes and activities and investment in the sustainability of project results? Review external project communication: Are proper means of communication established or being established to express the project progress and intended impact to the public (is there a web presence, for example? Or did the project implement appropriate outreach and public awareness campaigns?).
- *M&E:* Review the monitoring tools currently being used: Do they provide the necessary information? Do they involve key partners? Are they aligned or mainstreamed with national systems? Do they use existing information? Are they efficient? Are they cost-effective? Are additional tools required? How could they be made more participatory and inclusive? Examine the *financial management* of the project monitoring and evaluation budget. Are sufficient resources being allocated to monitoring and evaluation? Are these resources being allocated effectively?

6.1.1 Management

The project design has provided for a structured management arrangement. UNDP has the responsibility of the Implementing Agency (IA) under the NIM modality. The project is being executed by the Ministry of Environment and Forestry (MEF), which has the overall responsibility for the achievement of project results as UNDP's Implementing Partner (IP). The IP is subject to the micro assessment and subsequent quality assurance activities by UNDP.

UNDP provides overall management and guidance from its Country Office in Nairobi and the Regional Hub in Istanbul, and is also responsible for monitoring and evaluation of the project as per GEF and UNDP requirements. On its part UNDP provides the required support to the IP and the project team. The support is provided by way of inputs provided during the SC meetings and wherever required, offering the solutions to the problems faced by the project implementation team, e.g. it is helping with the procurement process due to the procedural issues related to the transfer of cash to the government account. UNDP also supports the process

of preparation of the annual workplans (and the corresponding budget) and its approval by the steering committee. UNDP in its role as the GEF Implementing Agency, is focused towards the achievement of the results of the project. The PIR for the project are being prepared regularly by the project team. UNDP provides its inputs to the PIRs on a regular and timely manner. The rating provided by UNDP for progress towards achievement of results for the project objectives and the project outcomes, has been in line with the ratings provided by the project team. It is to be noted that the in many cases situation at the time of MTR regarding the progress towards achievement of targets (for indicators), outcomes and objectives doesn't match with what has been reported in the PIR.

The project document has identified following environment and social risks and provided for the risk mitigation measures:

- Risk to communities and workers' health and safety posed by the improper handling of hazardous healthcare waste segregation and solid waste unregulated management in dumpsites. The project is providing adequate training and the required appliances for safe handling of the medical waste.
- To take care of the possible occupational health and safety issues due to physical, chemical, biological, and radiological hazards the project is providing adequate training and equipment for the introduced technologies for the management of HCW.

There was an initial delay in the start of the implementation of the project. Some of the activities involving long procurement processes are presently underway. These activities are important from the viewpoint of the results and effectiveness of the project. The procurement and subsequent implementation of the activities can only be completed if an extension of a year is granted to the project (please see recommendation 6). Completion of these procurement processes and effective implementation of the related activities are crucial towards achieving of the results by the end of the project. Thus, it is important that a one year, no-cost extension to the implementation timelines is provided.

Considering that the overall efforts and time from UNDP CO and the RTA gets divided across a number of projects under implementation as any given point of time, the level of technical support to the project is not sufficient. It would help, if the project implementation gets the benefit from the expertise of an international technical expert, hired under a contact for a longer period (part-time) to advise the project team on a regular basis (please see recommendation 11). The project may appoint an international technical expert to help and provide guidance on technical matters.

MEF has designated a senior official as the National Project Director (NPD) for the project. The NPD is responsible for overall guidance to project management, including adherence to the Annual Work Plan (AWP) and achievement of planned results as outlined in the Project Document, and for the use of UNDP funds through effective management and well-established project review and oversight mechanisms. The NPD also ensures coordination with various ministries and agencies, provide guidance to the project team to coordinate with UNDP, review reports and look after administrative arrangements as required by the Government of Kenya and UNDP.

The implementation of the project on a regular basis is done by the project management unit (PMU). The project has a full-time national project manager (NPM) supported by the project administrative staff and a full time 'Technical Advisor'. At the county level the implementation of the project is supported by the NEMA county Directors of in each of the four counties and the officials from the Ministry of Health Headquarters and in the four counties, the Greenbelt Movement , university of Nairobi as well as the Kenya Association of Manufacturers which has a dedicated official to the project. As the PMU has a full time 'Technical Advisor' there is adequate technical capacity within the project implementation team to guide and evaluate the work carried out by the consultants. Apart from the 'Technical Advisor' the technical aspects are also supported by the "Technical Committee (TE)'. The 'Technical Committee; is comprised of technical experts drawn from the participating institutions. TE drafts the Annual Work Plan and Quarterly Work Plan for the approval by PSC. The members of the technical committee steer the project in their respective institutions.

Significant part of the work is being done by government official at the county and headquarters level. Some of the activities for the project are being carried out by the consultants. The procurement of the consultants in done by the UNDP CO in consultation with the PMU and MEF, due to issues relating to the transfer of funds to the government account.

MEF on its part as the implementing partner for the project is focused towards achievement of the results of the project. The workplan for the project and the corresponding budget are prepared by the technical committees managed by the MEF. As mentioned earlier due to the issues relating to the transfer of cash to the country government the procurement is being carried out by UNDP. The management inputs and processes in practise are adequate. The PIRs are prepared by the project team and the designated officials from MEF provide the required inputs to the PIR in a timely manner. The rating provided by MEF have been in line with the ratings provided by the project team. It is to be noted that in many cases situation at the time of MTR regarding the progress towards achievement of targets (for indicators), outcomes and objectives doesn't match with what has been reported in the PIR.

The Project Steering Committee (PSC) and the Technical Committee which meets quarterly are in place and play a critical role in project monitoring and evaluation by quality assurance, using evaluations for performance improvement, accountability and learning, and ensuring that required resources are committed and providing overall direction to the project team.

Project implementation has responded to changing conditions and risks, and taken advantage of opportunities for partnerships and actions that support the overall project objective. The project had a slow start due to delayed hiring of the project manager and the other members of the project team.

A key reporting requirement, the inception report, was prepared after the inception workshop of the project. The PIRs of the years 2018 and 2019 (draft) were prepared, as per the requirements. The project also prepares the Annual Performance Reports regularly. The work plans for the project are prepared and followed. Quarterly progress reports for the project are also prepared regularly. Accordingly, **the management of the project is rated Satisfactory**.

6.1.2 Work planning

Work planning is being done as per the provisions in the project design document. Work plan for the first year was finalised subsequent to the project inception meeting. The work plan for the year 2019 is in place and is being followed. In accordance with the requirements, the work plans are prepared by the Project Manager, reviewed by the National Project Director and approved by the Steering Committee after deliberations. Work planning is carried out keeping in mind the log-frame in terms of timelines and the targets. Work planning is rated as **Satisfactory**.

6.1.3 Reporting

A key reporting requirement, the inception report, which documents the agreed work plans and other arrangements, was prepared and shared with the stakeholders during August 2016. The inception report documents the working arrangements and the responsible institutions/ agencies. PIRs for the project was prepared for the years 2018 and 2019 (draft). The project has also prepared the 'Annual Progress Reports' for the years 2017 and 2018. The quarterly progress reports are prepared and shared in accordance with UNDP / GEF requirements. The reporting aspect of the project management has been rated as **Satisfactory.**

6.1.4 Communications

At the time of MTR, the project did not have a website of its own. The project was using the websites of the implementation partners to disseminate the information about the work carried out under the project. The

project also has a Twitter account. The website of the UNDP CO, Kenya is also being used to disseminate the information about the activities and the results of the project. The project is regularly disseminating the information about the project and the results through the news channels (both online and print media). Apart from this the project is making the effective use of the capacity building, training, and awareness creation activities for targeted stakeholders, under different components of the project as a means of communication.

The project organised a workshop during August 2019, for creation of a project specific website. This will also act as a 'repository for information on chemicals and waste management in Kenya' and bridging the information gap among various actors in the chemicals and waste sectors. The project specific website once created would be used for dissemination of the information and for a two-way communication with the stakeholders. The project is in the process of hiring a consultant to work out and implement a communication strategy for the project.

More outreach and awareness creation activities are being planned by the project. The **communications aspect of the project management has been rated as Satisfactory.**

6.1.5 M&E systems

In line with the standard practice for GEF projects, provisions were made in the project design for mid-term review and a terminal evaluation. The main M&E activities planned at the design stage meet GEF and UNDP requirements and standard practices.

Quarterly progress reports are prepared as per the M&E plan and were made available during the MTR. Financial monitoring and evaluation of the project is being carried out using the ATLAS tool of UNDP, which generates reports such as the CDR to gauge the level of delivery on all the outcomes of the project.

The monitoring tools being used provide the required information. The monitoring tools being used are project specific and meets the requirements of the project design. The monitoring systems doesn't draw upon any of the national systems in Kenya. The tools being used are efficient and cost effective. However, the effectiveness of any monitoring tool depends on the accuracy of the information captured, which in the present case is captured manually in the monitoring tools. The monitoring tools being used is considered adequate. As at the stage of the design of the project, the impacts of the project on men and women were not considered significant, the project design has not provided any specific tools for monitoring of such impacts.

The steering committee is being chaired by the National Project Director, and includes the Focal Point from the Ministry of Environment, members from the Ministry of Health. The monitoring and evaluation budget provisions in the project are adequate. The **Monitoring and Evaluation aspects of project management are considered Satisfactory**.

6.2 Stakeholder engagement

Mid-term review questions (see Annex B)

- *Project management:* Has the project developed and leveraged the necessary and appropriate partnerships with direct and tangential stakeholders?
- *Participation and country driven processes:* Do local and national Government stakeholders support the objectives of the project? Do they continue to have an active role in project decision-making that supports efficient and effective project implementation?
- *Participation and public awareness:* To what extent has stakeholder involvement and public awareness contributed to the progress towards achievement of project objectives?

The main formal platform for engaging the stakeholders is the Steering Committee (SC). As was mentioned in section 6.1.4 as well, the project in addition to the engagement of the government stakeholders as PSC level managed to bring on-board many other beneficiaries and decision-makers, including local Governments of

counties of Nairobi, Mombasa, Nakuru and Kisumu. The project also built ties with the private sector companies to facilitate recycling of the waste. Strong bridges were built with local NGOs and CBOs to promote collection of waste at the point of generation and recycling and reuse of the collected waste.

The PSC has representatives from different concerned ministries and departments The SC does not have members from civil society, NGOs, research institutions, development agencies, trade & industry bodies or academia. PSC meetings are happening regularly. **Stakeholder engagement at an aggregate level has been rated as Satisfactory.**

6.3 Budget and co-financing

Mid-term review questions (see Annex B)

- Consider the financial management of the project, with specific reference to the cost-effectiveness of interventions.
- Review the changes to fund allocations as a result of budget revisions and assess the appropriateness and relevance of such revisions.
- Does the project have the appropriate financial controls, including reporting and planning, that allow management to make informed decisions regarding the budget and allow for timely flow of funds?
- Informed by the co-financing monitoring table to be filled out, provide commentary on co-financing: is co-financing being used strategically to help the objectives of the project? Is the Project Team meeting with all co-financing partners regularly in order to align financing priorities and annual work plans?

The project budget and sources of funds[18] for the project document are summarised in Table 17 below:

Table 17: Project Budget and GEF Funding (as per Project Document) (figures in USD)

Component	Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5	Total
Component 1: Streamlining sound management of chemicals and waste into national and county development activities through capacity building of MENR, MOH, county governments of Nairobi, Kisumu, Nakuru and Mombasa and the NGOs	56,500	205,500	93,500	80,500	64,000	500,000
Component 2: Introduce environmentally sound management of health care waste in selected healthcare facilities; policy and strategic plans to prepare them to adopt BAT and BEP disposal	202,000	196,500	172,500	159,500	169,500	900,000
Component 3: Demonstration of sound healthcare waste disposal technologies in a selected number of healthcare facilities in each county	2,000	505,500	878,500	266,000	98,000	1,750,000
Component 4: Minimizing releases of unintentionally produced POPs from open burning of waste	27,000	455,000	182,000	180,000	156,000	1,000,000
Component 5: Monitoring, learning, adaptive feedback, outreach and evaluation	8,000	15,500	56,500	15,500	54,500	150,000
Project Management Costs (PMC)	45,600	40,850	40,850	46,850	40,850	215,000
Total	341,100	1,418,850	1,423,850	748,350	582,850	4,515,000

Apart from the GEF funding there is considerable amount of co-financing for the project. Table 18, provides the details of the total budget and the co-financing budget for the project.

Table 18: Total Budget GEF funding and Co-financing budget and Co-financing realized till MTR[19]

[18] As per project Document
[19] Co-financing committed as per Project Document; Co-financing realized till June 2019 as per assessment of the project team

Outcome	Output/Activity Description	GEF Funding	Co-financing description	Co-financing Committed and Realized at MTR (USD)
Component 1. Streamlining sound management of chemicals and waste into national and county development activities through capacity building of MENR, MOH, county governments of Nairobi, Kisumu, Nakuru and Mombasa and the NGOs				
Outcome 1.1 Policies, strategies Regulatory and policy framework integrating the provisions of streamlining chemicals management into development activities and specifically those of the Stockholm convention and the SAICM recommendations, adopted and institutional capacity on U- POPs and waste management enhanced	Output 1.1.1: Overall policy framework and specific regulatory measures covering environmentally sound management of chemicals in general and POPs in particular through chemicals life cycle management developed and implemented.		GoK law-making and enforcement activities on POPs, personnel and office space: MENR 50,000 USD; NEMA 88,900 USD. KAM providing technical support on regulatory and training as well as in kind co-financing for workshop and training infrastructures (100,000 USD)	Committed: 238,900 Realized: 130,000
	Output 1.1.2: Key institutions have knowledge and skills to formulate and implement necessary chemicals and waste environmental policies, consistent with sound chemicals management principles and obligations to international agreements		GoK activities on training and policy making, personnel and office space (MENR 50,000 USD). KAM providing technical support on regulatory and training as well as in kind co-financing for workshop and training infrastructures (100,000 USD)	Committed:150,000 Realized: 60,000
	Output 1.1.3 Key institutions have incorporated sound management of chemicals and wastes, including POPs, in their activities.		GoK (MENR) activities on enforcement and supervision. (50,000 USD). KAM providing technical support on regulatory and training as well as in kind co-financing for workshop and training infrastructures (100,000 USD)	Committed:150,000 Realized: 60,000
	Output 1.1.4 National coordinating meetings on POPs held regularly (4 times per year). without GEF financial support		Meeting to be carried out under the budget of MENR (200,000 USD)	Committed:200,000 Realized: 100.000
Outcome 1.2 Monitoring activities intensified and strengthened and PRTR database in place.	Output 1.2.1 At least 70% of laboratory analyses in research and monitoring institutions required to monitor the implementation of national policy on hazardous chemicals and wastes being carried on a cost recovery basis		Labs providing in kind and grant co- financing: cooperation with laboratory facilities under MENR (1,000,000 USD) (University of Nairobi providing training services 40,112 USD) WARMA providing analytical services, analytical equipment, laboratory and office space and personnel (250,000 USD)	Committed:1,290,112 Realized: 23,000
	Output 1.2.2 70% of universities nationwide include issues of hazardous chemicals and wastes, risks and		University of Nairobi providing training facilities, teachers, office	Committed: 478,482 Realized: 10,000

Outcome	Output/Activity Description	GEF Funding	Co-financing description	Co-financing Committed and Realized at MTR (USD)
	legislation in curriculum		space (371,741 USD) and providing technical support for graduate and post-graduate courses (106,741 USD)	
	Output 1.2.3. PRTR Database and reporting system in place.		NEMA providing infrastructures, equipment and personnel for hosting the PRTR database (9,000 USD)	Committed: 9,000 Realized: 0
Total Component 1		**500,000**		Committed: **2,516,494** Realized: 383,000
Component 2. Introduce environmentally sound management of health care waste in selected healthcare facilities; policy and strategic plans to prepare them to adopt BAT and BEP disposal.				
Outcome 2.1 Personnel of hospital facilities and control authorities at central and county level have enough capacity guidance and equipment to manage healthcare waste in an Environmental Sound Manner	Output 2.1.1 Procedures and guidelines for the assessment and implementation of hazardous waste management at healthcare facilities built on lessons and examples from the application of the I-RAT tool under GEF4 /UNDP projects worldwide and on the WHO bluebook "Safe Management of Wastes from Health-care Activities" developed and adopted		MOH team to lead the drafting and revision of procedures and guidelines: experts, office space, meeting facilities (200,000 USD)	Committed: 200,000 Realized: 200,000
	Output 2.1.2 A national healthcare waste handbook containing guidelines for HCWM drafted and adopted by the MOH, including introduction of non-mercury devices in the HCFs		MOH coordinating the drafting and revision of the HCWM (experts, meeting facilities) (200,000 USD)	Committed: 200,000 Realized: 100,000
Outcome 2.2 Implementation of BAT/BEP at selected hospital facilities successfully demonstrated and measured against the baseline	Output 2.2.1 Hospital personnel at all level trained on the implementation of the above procedures		Counties of Nairobi Mombasa, Nakuru, Kisumu and supporting training and providing training facilities	0
	Output 2.2.2 Baseline assessment of each healthcare facility based on the assessment procedures developed in 2.1.1 carried out, and waste management plans based on the baseline assessment level drafted and implemented		Counties of Nairobi Mombasa, Nakuru, Kisumu and supporting baseline assessment through making available personnel and necessary equipment (60,000 USD)	Committed: 60,000 Realized: 40,000
	Output 2.2.3 ESM management of healthcare waste (based on WHO bluebook) implemented in 4 facilities in each county (12 facilities) including replacement of mercury devices with non-mercury		Counties of Nairobi Mombasa, Nakuru, Kisumu and supporting management of healthcare waste (personnel, necessary equipment and infrastructures) (60,000 USD) (MENR 320,000 USD for personnel, 608,433 USD for Tec. Spec. and procurement of HCW ESM equipment)	Committed: 988,433 Realized: 20,000
	Output 2.2.4 Final assessment of the		Counties of Nairobi,	Committed: 60,000

Outcome	Output/Activity Description	GEF Funding	Co-financing description	Co-financing Committed and Realized at MTR (USD)
	healthcare facility to measure results achieved with the implementation of the ESM management against baseline is carried out and estimate amount of U-POP release avoided.		Mombasa, Nakuru, Kisumu and supporting final assessment through making available personnel and necessary equipment (MENR 60,000 USD)	Realized: 0
Total Component 2		**900,000**		Committed: **1,508,433** Realized:
Component 3. Demonstration of sound healthcare waste disposal technologies in a selected number of healthcare facilities in each county				
Outcome 3.1. Feasibility analysis and procurement of ESM technologies for healthcare waste disposal completed	Output 3.1.1 Feasibility study and term of reference for non-combustion or low-U-POPs emission technologies for healthcare waste disposal in selected hospitals or waste management facilities drafted.		GoK (MOH) to provide experts and meeting facilities for feasibility study (100,000 USD)	Committed: 100,000 Realized: 50,000
Outcome 3.2 BAT/BEP technologies for the disposal of healthcare waste successfully established and demonstrated, with a potential reduction of U- POPs emission in the order of 19gTeq/year	Output 3.2.1 Demonstration and performance assessment of the technologies in the selected facilities completed (at least 4 facilities or an overall amount of waste in the order of 630t/yr.		Cooperation with the JICA / CTEA project under MENR aimed at integrating large-scale incineration with HCW management and pre-treatment (MENR 8,900,000 USD)	Committed: 8,900,000 Realized: 420,000 The JICA project stalled due to lengthy procedures of buying land for the Project. There has been progress in buying of land
	Output 3.2.2 Waste disposal activities of hospital facilities/programs are documented and their performance is evaluated to exemplify best practices in health- care waste management		MOH providing funding to counties for upgrading waste storage and disposal facilities in health care waste facilities even through coordinate projects and making available infrastructures for HCWM through counties (2,680,000 USD)	Committed: 2,680,000 Realized: 3,150,000
	Output 3.2.2 Useful replication toolkits on how to implement best practices and techniques are developed		GoK (MOH) providing experts and meeting facilities for replication toolkit (100,000 USD)	Committed: 100,000 Realized: 0
Total Component 3		**1,750,000**		Committed: **11,780,000** Realized: 3,620,000
Component 4. Minimizing releases of unintentionally produced POPs from open burning of waste.				
Outcome 4.1. Awareness raising and capacity strengthening on ESM management of solid waste ensured.	Output 4.1.1 Awareness raising activities for the communities and the municipalities aimed at enhancing 3Rs of waste		GBM and KDS providing co-financing on training and awareness raising (GBM 239,929 USD, KDS 20,000 USD) (MENR 150,000 USD for local experts, training and training facilities). KAM providing technical support on training, awareness raising, incentive mechanisms, technology assessment as well as in kind co-	Committed: 504,429 Realized: 251,636

Outcome	Output/Activity Description	GEF Funding	Co-financing description	Co-financing Committed and Realized at MTR (USD)
			financing for workshop and training infrastructures (100,000 USD)	
	Output 4.1.2 Regulatory framework for the recovery of waste material (glass, organic, plastic) and for licensing of the recovery activity at county and central level improved to integrate SC requirements		MENR supporting the project by means of law-making and law-enforcement activities, personnel and meeting facilities (200,000 USD). NEMA supporting regulatory work (30,000 USD). KAM providing technical support on training, awareness raising, incentive mechanisms, technology assessment as well as in kind co-financing for workshops and training infrastructures (100,000 USD).	Committed: 330,000 Realized: 181,000
	Output 4.1.3. Counties provided with training, manual, and technical assistance for the management of solid wastes.		NEMA supporting counties with office space, and personnel cost (100,000 USD); KAM providing technical support on training, awareness raising, incentive mechanisms, technology assessment as well as in kind co-financing for workshops and training infrastructures (100,000 USD)	Committed: 200,000 Realized: 20,000
Outcome 4.2 Sound Management of solid waste in targeted municipalities implemented with the support of NGOs, with a reduction of unintentionally produced POPs from the burning of solid waste of 23 g I-TEQ/year (10 % of the current estimate of 247g I-TEQ/year). Emergency plan to reduce exposure of population to harmful substances implemented.	Output 4.2.1 Communities selected for demonstrating plans and actions for the reduction of solid waste open burning by increasing 3Rs of waste.			0
	Output 4.2.2. Initiatives for reducing, reuse and recycle of waste and for composting, collection of compostable municipal waste for communities in three counties of Nairobi, Mombasa and Nakuru implemented with a PPP approach and supervised with the support of NGOs.		NGOs providing equipment and facilities for the segregation and collection of organic waste. (GBM through office space (39,390 USD) and integration with related project and personnel (550,000 USD); KDS through analytical services, and equipment, CBOs mobilisation, other equipment (58,000 USD); MENR (867,000 USD, for monitoring activities and support on	Committed: 1,914,390 Realized: 155,000

Outcome	Output/Activity Description	GEF Funding	Co-financing description	Co-financing Committed and Realized at MTR (USD)
			solid waste management in selected provinces).	
			Private industries providing co financing under KAM coordination with specific investment, manpower, technology improvement, industrial infrastructures etc. (400,000 USD)	
	4.2.3. Local initiative for the re-use / recycling of other non-hazardous waste streams (i.e. plastics).		Local and central NGOs providing equipment and facilities for the segregation and collection of plastic waste (GBM through office space (39,390 USD) and integration with related project and personnel (518,847 USD); KDS through analytical services, and equipment, CBOs mobilisation, other equipment 50,000 USD). MENR (1,000,000 USD for monitoring activities and support on solid waste management in selected provinces); Private industries providing co-financing under KAM coordination with specific investment, manpower, technology improvement, industrial infrastructures etc. (500,000 USD)	Committed: 2,108,237 Realized: 555,000
4.3 Municipal waste disposal sites with adequate management practices (non-burn).	4.3.1 Prioritization of open-burning landfills to be closed and cleaned up, emergency plans including social and resettlement issues and clean-up plans for at least 3 landfills drafted.		MENR providing technical assistance on the prioritization of interventions on landfills. (100,000 USD); NEMA supporting with analytical services (10,000 USD).	Committed: 110,000 Realized: 55,000
	4.3.2. Emergency measures for reducing release of contaminant in the environment and the exposure of the population implemented in one high priority site.		NGOs providing assistance on landfill surveillance and training (200,000 USD); NEMA supporting with enforcement of emergency measures (36,720 USD).	Committed: 236,820 Realized: 60,000
Total Component 4		**1,000,000**		Committed: **5,203,876** Realized: 1,277,636
Component 5: Monitoring, learning, adaptive feedback, outreach and evaluation		**150,000**		
Total All Components		**4,300,000**		Committed: **21,008,803** Realized: 8,478,864
Project Management Budget		**215,000**		

Outcome	Output/Activity Description	GEF Funding	Co-financing description	Co-financing Committed and Realized at MTR (USD)
Project Total		**4,515,000**		Committed: **21,008,803** Realized: 8,478,864

As is evident there is significant planned co-financing for all the Outcomes of the project. The implementation is the project is being supported by the government counterparts as per the plans, thereby signifying the in-kind contribution details of which have been provided in Table 18.

Cumulative disbursement till June 2019 is about 1.8 million USD which is much short of the budget provisions in the project document. The cumulative General Ledger (GL) as on June 2019 is about 40% (as per PIR for the year 2019). The cumulative GL delivery is also significantly short (at 56.28%) of the expected delivery. One of the reasons for lower achievement of the budget utilisation is that the activities pertaining to procurement of equipment for HCFs for disposal of HCW in an ESM are yet to start. This budget item alone accounts for about 30% of the overall planned GEF funding (please see recommendation 7 as well). Going forward once the activities pertaining to procurement of the equipment will start, the situation of budget utilisation would improve.

One of the issues at the time of MTR is the effectiveness of the project in terms of its global environment benefits (reduction in the release of UPOPs). As was mentioned earlier (please see section 5.2), with the present situation the project would hardly lead to the reduction in the release of UPOPs. However, with the provision of waste treatment equipment to the HCF and with the implementation of some of the MTR recommendations, the situation will improve significantly. Financial Audit of the project is carried out as per the requirements. As the budget utilisation of the project is expected to improve during the rest of implementation period. Budget utilisation of the project is rated as **Satisfactory**. Based on the ratings above for the different aspects, Implementation and Adaptive Management has been rated as **Satisfactory**.

7. FINDINGS: SUSTAINABILITY

Mid-term review questions (see Annex B)

- Whether the risks identified in the Project Document, Annual Project Review/PIRs and the ATLAS Risk Management Module are the most important and whether the risk ratings applied are appropriate and up to date? If not, explain why.
- *Financial*: What is the likelihood of financial and economic resources not being available once the GEF assistance ends (consider potential resources can be from multiple sources, such as the public and private sectors, income generating activities, and other funding that will be adequate financial resources for sustaining project's outcomes)?
- *Socioeconomic*: Are there any social or political risks that may jeopardise sustainability of project outcomes? What is the risk that the level of stakeholder ownership (including ownership by Governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained? Do the various key stakeholders see that it is in their interest that the project benefits continue to flow? Is there sufficient public/stakeholder awareness in support of the long -term objectives of the project? Are lessons learned being documented by the Project Team on a continual basis and shared/ transferred to appropriate parties who could learn from the project and potentially replicate and/or scale it in the future?
- *Institutional*: Do the legal frameworks, policies, governance structures and processes pose risks that may jeopardize sustenance of project benefits?
- *Environmental*: Are there any environmental risks that may jeopardise sustenance of project outcomes?

7.1 Project risks

At the design stage, a thorough risk analysis was carried out and appropriate risk mitigation strategies were worked out. Annex 1 of the project document gives an overview of risks identified at the time of project design.

Most of the risks identified at the time of project design are the 'Internal Risks'. Internal risks are project-inherent or can be controlled by the project management. Against this the external risks are of policy-economy-international nature, and no such risks were identified at the project design stage. One of the risks which did not get identified at the time of project design, and which is impacting the results of the project is the effectiveness of the capacity building and technical training of the stakeholders towards removal to facilitate proper implementation of the BAT and BEP for management of the SW and HCW. For example, there is still lack of understanding amongst the stakeholders regarding the need to dispose of the treated HCW (using microwave or autoclave technology) in a manner where it does not gets burned. Also, amongst the national counter parts, there is gap in the understanding regarding the PPP models for effectively managing the SW (please see recommendation 8).

One of the other risks which has been noted at the time of MTR is the acceptance by the 'health care workers' of the new procedures required to implement the non-burn technologies (separation of sharps, segregation of different types of HCW etc.). This would require not only on the job training, demonstration, enforcement of the procedures and change in the established practices.

There are provisions, in the project design to train human resources and facilitate technology transfer to take care of the technology (understanding the procedures to ensure proper implementation of the non-burn technologies) risks. However, going forward the project would need to identify the critical needs/aspects of training the relevant health care workers to ensure proper implementation of the non-burn technologies for HCW.

With the implementation of the recommendations being made at MTR, most of the technical risks to achieve the desired results and sustain them would get addressed. Thus, at an aggregate level, technical risks to sustainability of the project are considered **low**.

7.2 Financial risks to sustainability

The project has following three parts;
Component 1: Implementation of the 'Sound Chemicals Management Program' in the country
Component 2 and 3: Reduction in the release of UPOPs due to burning of HCW
Component 4: Reduction in the release of UPOPs due to dumping of SW (which eventually gets burned)

For the 'Sound Management of Chemicals' part of the project, the strategy comprises of increase awareness among the industry and civil society on cleaner production, and on alternatives to POPs; increase in analytical service and the establishment of sustainable laboratory services; improvement of regulatory texts. For the laboratory services the project has envisaged creation of a financially sustainable model wherein the users of the laboratory facilities would pay for the services. There are no financial risks to sustainability for Component 1 of the project

For the Components of the project pertaining to addressing the emissions of UPOPs due to HCW management, the project strategy addresses the two key issues of 'poor segregation' and 'poor choice of technology for treatment and disposal of waste'. The project design has provided for the capacity building, training and regulatory measures under this component. The GEF project would also provide the equipment for the use of non-burn technology for treatment and disposal of the HCW at a number of HCFs. Post project, the operation and maintenance of the waste treatment equipment will be carried out by the respective HCFs. There are no financial issues regarding the continuation of the operations of the waste treatment facilities.

For the component of the project pertaining to SW management, the project is supporting the segregation and collection of the waste at the point of generation of the waste and its disposal by alternative means (alternative to the dumping at the dump sites) e.g. recycling, composting etc. This is expected to be self-sustaining and is expected to lead to increase in the income levels of the people engaged in the business of collected and management of the waste. Thus, there would not be any financial issues for the continuation of the activities.

The **financial sustainability of the project is assessed to be likely**.

7.3 Socio-economic risk to sustainability

While at the global environmental benefits level the priorities of the project are reduction in the emission of UPOPs, the project has very significant local environmental benefits like reduction in the emission of NOx, SOx, particulate matter, heavy metals etc. There is an existing level of high awareness with in the national counterparts and within the general public, regarding the issues with the high levels of pollution. This awareness would get further enhanced due to the efforts which will be carried out by the project. The there are no risks to the sustainability of the project form the **socioeconomic viewpoint and the sustainability is likely.**

7.4 Institutional framework and governance risks to sustainability

The institutional framework for implementation of the project is embedded to the Ministry of Health (for the HCW) and the 'Ministry of Environment and Forestry'. The local ministry officials at the county level forms the backbone of the institutional framework for the management of the HCW and the SW. This institutional framework and governance structure have been in place much before the project and no additional institutional framework has been created under the project. There are no risks to institutional framework and governance risks to the sustainability of the results of the project. The sustainability of the results of the project from the view point of institutional framework and governance is likely.

7.5 Environmental risks to sustainability

As had been mentioned before (please see section 2.3), the project has significant local environmental benefits with practically no negative environmental impacts of the project. There is a remote possibility of some local level issues in case some of the dumpsites are located to other places. However, considering that the emphasis of the project is on 3Rs for SW management and use of BAT and BEP by taking on board the private sector in PPP mode, the likely negative local level impacts are expected to be well taken care. Though, there are minor risk of environment-related issues blocking the newly created SW management facilities from the view point of environmental risk, sustainability of the project is **Likely**.

8. CONCLUSIONS AND RECOMMENDATIONS

8.1 Conclusions

Mid-term review questions (see Annex B)

- Identify remaining barriers to achieving the project objective in the remainder of the project, and by reviewing the aspects of the project that have already been successful, identify ways in which the project can further expand these benefits
- Provide MTR Ratings & Achievement Summary Table summarising the ratings on a) results, b) implementation and adaptive management, c) sustainability with a short description of the rating's justification

8.1.1 Summary of main findings and of ratings

The following Table provides a summary of the ratings for;
a) Progress towards Results
b) Project Objectives
c) Implementation and Adaptive Management
d) Sustainability

Table 19: Mid-term review ratings and achievements summary

Measure	MTR Rating[20]	Achievement Description
Project Strategy	NA	Kenya is progressively reaching a fairly stable economic situation and is proactively proceeding with addressing issues relating the emissions of POPs. In line with the priorities of the government, the present GEF project has following three parts; • Component 1: Implementation of the 'Sound Chemicals Management Program' in the country • Component 2 and 3: Reduction in the release of UPOPs due to burning of HCW • Component 4: Reduction in the release of UPOPs due to dumping of SW (which eventually gets burned at the dumpsite) For the 'Sound Management of Chemicals' part of the project, the strategy is centred around the effective ways towards implementation of the plans envisaged by the Stockholm National Implementation Plan (NIP) and the SAICM Implementation Plan (SIP). This part of the project is focused on the activities which have synergies with the other two components of the project (emission of UPOPs due to burning of HCW and emissions of UPOPs due to dumping of SW). Accordingly, the strategy for this part of the project comprises of the following • Increase awareness among the industry and civil society on cleaner production, and on alternatives to POPs • Increase in analytical services for priority chemicals especially under Stockholm, Rotterdam and Minamata Conventions and the establishment of more sustainable laboratory analysis services air, water and soil media • Improvement of regulatory texts and their enforcement towards the implementation of a sound management of chemicals.

[20] HS: Highly Satisfactory, S: Satisfactory, MS: Marginally Satisfactory, MU: Marginally Unsatisfactory, U: Unsatisfactory, HU: Highly Unsatisfactory, L: Likely, ML: Moderately Likely, MU: Moderately Unlikely, U: Unlikely, NR: Not Rated

Measure		MTR Rating[20]	Achievement Description
			For the Components of the project pertaining to addressing the emissions of UPOPs due to HCW management, the project strategy addresses the two key issues of 'poor segregation' and 'poor choice of technology for treatment and disposal of waste'. Thus, the strategy comprises of the following; • Building capacity at national, county and HCF level for the introduction of 'Best Available Technologies (BAT)' and 'Best Environmental Practices (BEP)' • Drafting and disseminating technical guidance on HCWM, officially endorsed by the government • Strengthening the legislative and policy framework governing HCWM and Mercury at national and county level • Improving HCWM awareness and education • Increase segregation and minimisation of waste. This is to be done mostly by establishing and enforcing HCW management units in the HCFs and providing on-site continuous training and technical assistance to the personnel of the HCFs. In addition, key waste management equipment (bags, bins, cart, sharp boxes) are to be provided to the project HCFs. • Improvement of HCW disposal technology and increased centralisation of waste disposal. For the Component of the project pertaining to the SW, the strategy is focused on the following: • Creation of alternative approaches to dispose different constituents of the 'Solid Waste' using 'integrated solid waste management'. • The strategy relies on the engagement of communities already involved in the informal management of solid waste. This includes waste separation and recycling; development of small businesses based on waste recycling and composting. This will be achieved by enhancing the "3R" economy and enabling municipalities to establish Public Private Partnerships (PPP) schemes with the support of NGOs that can at the same time reduce the waste flows being burnt, reduce poverty and provide an alternative opportunity for people living at the dumpsites. • Support to the development of a new stream of recycling for plastics • Development of emergency measures to avoid accidental or voluntary burning of wastes at the dumpsites • Active involvement of three sets of actors that are essential to build an alternative, sustainable scenario: the private sector, the CSOs and the counties.
Progress towards results	**Project Objectives**	**MS**	The stated objective of the project is "Reduction of the release of U-POPs and other substances of concern and the related health risks, through the implementation of environmentally sound management of municipal and healthcare wastes and of an integrated institutional and regulatory framework covering management of and reporting of POPs. "Accordingly, the project design has components / activities which are specific either to the 'Sound Management of Chemicals' or 'Reduction of UPOPs emissions due to HCW' or "Reduction if the UPOPs emissions due to SW' It is targeted that by the end of the project there would be increased

Measure		MTR Rating[20]	Achievement Description
			level of awareness/capacity, regulatory framework and laboratory services for 'sound management of chemicals'; reduction in the emissions of UPOPs due to HCW by 19 gTEq/ yr.; disposal of minimum 50% of the HCW in a ESM; reduction in the emission of 20.0 gTEq/ yr. due to emergency measures at dumpsites; reduction in the emission of UPOPs by 3.0 gTEq/ yr. due to 3R of collected (metals, plastics, glass, paper, organic matter) at the source of generation. The project is implementing (or has planned to implement) most of the activities/targets mentioned in the result frame-work of the project. In spite of this, due to a number of reasons, presently, the progress towards achievement of most of the above-mentioned expected results by the end of the project is likely (unless corrective actions are undertaken). For example; • The project design has not provided for any emergency measures for reduction of release of emissions of UPOPs at the dumpsites (please see recommendation 2). There is no action on this front by the project. Thus, with the present state of affairs, no achievement towards reduction in the release of UPOPs due to emergency measures is expected. • Considering the present scale of activities for collection of the waste at the source of generation and considering the fact that the inert part of the SW in the baseline case was not getting combusted at the dump sites, the targeted reduction of 3.0 gTEq/ yr. is not expected to be achieved, if corrective actions are not implemented (please see recommendation 3) • Although, the project is promoting the use of autoclaves and microwaves for treatment of HCW, the material after such treatment is getting finally disposed of at the dumpsites (where it eventually gets burned), thus, there is no reduction in the release of UPOPs (please see recommendation 5). It is expected that by the end of the project the regulatory framework for management of chemicals and UPOPs would be in place and there will be increased level of awareness/ capacity amongst the stakeholders for management of the chemicals. Considering this, the progress towards achievement of 'project objectives' has been rated as **Moderately Satisfactory**, even though significant shortfalls towards achievement of reduction in the release of UPOPs is expected.
	- Outcome 1.1	**MS**	Component 1 of the project pertains to capacity building of relevant ministries at the central level and the county governments where the pilot activities under the project are being carried out (Nairobi, Kisumu, Nakuru and Mombasa) and the NGOs/ CBOs. Under Outcome 1.1 of the Component 1, Policies, strategies regulatory and policy framework are to be integrated with provisions of streamlining chemicals management into development activities, thereby enhancing the institutional capacity on UPOPs and waste management. Further, under this component of the project, creation of a conducive regulatory and policy framework, along with the training of the relevant institutions for implementation of the SC and SAICM is envisaged. Some of the activities for achieving Outcome 1.1 has already been carried out. However, a large number of activities for achieving the

Measure		MTR Rating[20]	Achievement Description
			outputs/targets are still to be carried out. Accordingly, **the progress towards achievement of results for Outcome 1.1 has been rated as Moderately Satisfactory**.
	- Outcome 1.2	**NR**	Outcome 1.2 relates to intensification and strengthening of the monitoring activities for chemicals and creation of PRTR database. The project has initiated the efforts (prepared TOR for appointing a consultant) for some of the activities to achieve this outcome. However, there are issues (project design issues) with this Outcome (please see recommendation 4). Due to this reason the **progress towards achievement against this Outcome has not been rated**.
	- Outcome 2.1	**S**	Component 2 of the project is focused on facilitating demonstration of BEP and BAT for treatment and disposal of the HCW in the HCFs. While Outcome 2.1 of Component 2 is focused on creation of conducive conditions (regulations and standards) for implementation of the BEP and BAT at the national level, Outcome 2.2 is focused on facilitating implementation of BAP and BAT at the selected HCFs. Most of the activities/indicators provided in the results frame-work for Output 2.1 are either being implemented and are planned. It is likely that by the end of the project the proposed regulations and standards would be in place. Accordingly, **the progress towards achievement of results for Outcome 2.1 is rated as Satisfactory.**
	- Outcome 2.2	**MS**	As mentioned above Output 2.2 of Component 2 of the project is focused on facilitating demonstration of BEP and BAT for treatment and disposal of the HCW in the selected HCFs. Facilitation is to be done by carryout baseline assessment, training of the staff of the HCFs, **minimizing the waste stream, segregation of waste and introducing recycling activities** etc. Most of the activities/indicators provided in the results frame-work for Output 2.2 are either being implemented and are planned. However, the impacts and effectiveness of such activities is not visible. For example, the staff of the HCFs are still not clear about the need and procedure for segregation of waste for implementing BEP and BAT. Further, there is lack of understanding amongst the staff regarding the possibilities to recycle the HCW (please see recommendation 4). Accordingly, the **progress towards achievement of results for Output 2.2 has been rated as Moderately Satisfactory**.
	- Outcome 3.1	**S**	Component 3 of the project is a follow up of the Component 2 of the project, and is aimed at implementation of BEP and BAT at the HCFs. While doing so the project is to also make good use of some of the existing facilities for non-burn technologies (microwave, autoclave) at some of the HCFs. Also, the project is to upgrade the incinerators at some of the HCFs to minimise the release of UPOPs. Apart, from the use of existing facilities for non-burn technologies and up gradation of the incinerators, the project is to provide new equipment for establishment of non-burn technologies for treatment of HCW. The aim of Component 3 is to reduce the release of UPOPs of about 19gTEq/yr. Output 3.1 of Component 3, relates to the feasibility study in terms

Measure		MTR Rating[20]	Achievement Description
			of technology type (microwave, autoclave), technical specifications, and cost effectiveness of the new non-burn technologies based HCW treatment facilities to be established under the project. Output 3.1 also includes the technical specification of the APCS for up-gradation of some of the existing incinerators. The project has already worked out the TOR for the consultants to be hired for carrying out the activities for achieving the Output 3.1. Accordingly, **the progress towards achievement of results for Outcome 3.1 is rated as Satisfactory**.
	- Outcome 3.2	**U**	As mentioned above under Outcome 3.2, new non-burn technology based HCW management facilities would be created as some of the HCFs. The activities for achieving this Outcome can only be carried out after achievement of Outcome 3.1. Considering that activities for achieving 3.1 are yet to be initiated, further, considering the procurement and establishment of HCWs management facilities would be a time-consuming process, the Outcome 3.2 would be achieved only in case a no-cost extension to the project is provided (please see recommendation 6). As mentioned before (under Outcome 2.2), presently there is lack of understanding amongst the HCF staff regarding the need to segregate the waste, recycle the treated waste to the extent possible etc. to ensure that there is no release of UPOPs in the overall process of using non-burn technologies for HCW management. For the couple of HCFs where non-burn technologies are already in use (these non-burn facilities were created with support from the donor community in an earlier project), the final disposal of the shredded waste is carried out at the dumpsites (where it eventually gets burned) leading to release of UPOPs. The project has targeted reduction of release of 19.0 gTEq/ yr. of UPOPs from the HCFs where the interventions on the ground are being supported by the project. This is against the baseline figure of release of 19.0 gTEq/ yr. from these HCFs. Thus, the project is targeted zero release of UPOPs due to treatment of HCW at the targeted HCFs. It is to be noted that this is not possible, firstly because not all the facilities will be using the non-burn technologies and secondly as all the medical waste (after treatment) can't be recycled. Some of the material like bandages, gauges etc. would still need to be burned (please see recommendation 1). As the targeted reduction in the release of UPOPs can't be achieved, **the progress towards results for Outcome 3.2 is rated as Unsatisfactory.** With the correction in the figures for targeted reduction in the release of UPOPs and implementation of the recommendations, the situation would change by the end of the project.
	- Outcome 4.1	**S**	Component 4 of the project is focused on reducing the release of UPOPs due to management of SW. Outcome 4.1 of Component 4 is to facilitate implementation of the measures to reduce the release of UPOPs by way of awareness creation, training, capacity building of stakeholders and regulations. Most of the activities/indicators provided in the results frame-work for Output 4.1 has already been implemented. The regulations

Measure		MTR Rating[20]	Achievement Description
			regarding the management of SW are likely to be in place by the end of the project. Accordingly, the **progress towards achievement of results for Output 4.1 has been rated as Satisfactory**.
	- Outcome 4.2	**MS**	Outcome 4.2 of the project pertaining to reduction in the release of UPOPs due to management of SW is focused on the engagement of communities already involved in the informal management of solid waste. This includes waste separation and recycling; development of small businesses based on waste recycling and composting. The reduction in the release of UPOPs is to be achieved by enhancing the "3R" economy and enabling municipalities to establish Public Private Partnerships (PPP) schemes with the support of NGOs that can at the same time reduce the waste flows being burnt, reduce poverty and provide an alternative opportunity for people living at the dumpsites. The targeted reduction in the release of UPOPs by these measures above is 3.0 gTEq/ yr. In the baseline situation the inert parts (no decayable like plastic, metals, glass, rubber) of the SW were not getting combusted at the dump sites as there were gets sorted out at the dumpsites. Thus, it is the collection of decay-able organic matter (food waste, paper etc.) and their disposal in ways other than dumping/burning which would lead to reduction in the release of UPOPs. The project has either implemented or is planning to implement the activities mentioned in the results framework to achieve the Outcome 4.2. The project is supporting collection of waste paper at the source of generation and its recycling. The project is also supporting collection of some of the organic waste at the source of generation (markets, food outlets etc.) and its disposal by the CBOs by composting. However, the scale of such activities is quite small. Considering the present scale of activities for collection of the waste at the source of generation and considering the fact that the inert part of the SW in the baseline case was not getting combusted at the dump sites, the targeted reduction of 3.0 gTEq/ yr. is not expected to be achieved, if corrective actions are not implemented (please see recommendation 3). Accordingly, the **progress towards results for Outcome 4.2 has been rated as Moderately Satisfactory**.
	- Outcome 4.3	**U**	Under Outcome 4.3 of the project, waste management practises (non-burn) are to be implemented at dumpsites to reduce the release of UPOPs due to burning of SW. The targeted reduction in the release of UPOPs due to the emergency measures is 20.0 gTEq/ yr. The project design has not provided for any emergency measures for reduction of release of emissions of UPOPs at the dumpsites (please see recommendation 2). Also, there is no visibility regarding the funds which would be required for carrying out the emergency measures at the dumpsites. There is no action on this front by the project. Thus, with the present state of affairs, no achievement towards reduction in the release of UPOPs due to emergency measures is expected. Accordingly, **the progress towards achievement of results for Outcome 4.3 is rated as Unsatisfactory**.

Measure	MTR Rating[20]	Achievement Description
Implementation and adaptive management	**S**	The project is being implemented under NIM with the Ministry of Environment and Forestry (MEF), as the responsible agency for the achievement of the project results as the implementing partner (national implementing partner). The implementation of the project on a regular basis is done by the project management unit (PMU). The project has a full-time national project manager (NPM) supported by the project administrative staff and a full time 'Technical Advisor'. Consultants have been engaged to undertake studies/activities that establish a baseline and identify gaps that inform the implementation partners delivery of planned project activities. UNDP CO has supported MEF's request for procurement of the consultants in consultation with the PMU, when there was a challenge to the transfer of funds to the government account. The Project Steering Committee (PSC) is in place and plays a critical role in project monitoring and evaluation by quality assurance, using evaluations for performance improvement, accountability and learning, and ensuring that required resources are committed and providing overall direction to the project team. As the PMU has a full time 'Technical Advisor' there is adequate technical capacity within the project implementation team to guide and evaluate the work carried out by the consultants. Project implementation has responded to changing conditions and risks, and taken advantage of opportunities for partnerships and actions that support the overall project objective. The project had a slow start due to delayed hiring of the project manager and the other members of the project team. A key reporting requirement, the inception report, was prepared after the inception workshop of the project. The PIRs of the years 2018 and 2019 (draft) were prepared, as per the requirements. The work plans for the project are prepared and followed. Quarterly progress reports for the project are also prepared regularly. Accordingly, **the management of the project is rated Satisfactory.**
Sustainability	**L**	At an aggregate level, technical risks to sustainability of the project are considered low. The financial sustainability of the project is assessed to be likely. At this mid-point in project implementation, socioeconomic sustainability is considered as likely. From the view point of institutional framework and governance risks, the sustainability of the project is Moderately Likely. From the view point of environmental risk, sustainability of the project is Likely. At an aggregate level the sustainability of the project is assessed as Likely

8.1.2 Conclusions

The project is implementing (or has planned to implement) most of the activities/targets mentioned in the result frame-work of the project. It is expected that by the end of the project the regulatory framework for management of chemicals and UPOPs would be in place and there will be increased level of awareness/ capacity amongst the stakeholders for management of the chemicals and management of HCW and SW leading to reduction in the emissions of UPOPs. However, unless some corrective actions are taken, with the present state of affairs the level of reduction in the release of UPOPs would fall short of the targets set for the project. This is partly due to setting of the unrealistic targets and partly due to inadequate provision in the project design towards achieving the targets towards reduction in the release of UPOPs.

The project has envisaged reduction in the release of UPOPs due to implementation of the emergency measures, but the project design has not provided for any such emergency measures. During this MTR it is being recommended that the project facilitate implementation of non-burn technologies (e.g. composting) for treatment of SW in PPP mode. This will lead to reduction in the release of UPOPs due to treatment of SW. However, considering that the overall process of selecting the private partner, establishment of the facilities etc. is a long process, the results of such an initiative would get realised only after the implementation timelines of the project.

The project design has provided for complete elimination of release of UPOPs at the selected HCFs due to implementation of non-burn technologies. It must be appreciated that 100% elimination of the emissions of UPOPs is not possible, as some of the HCW can't be recycled and would need to be burned. However, the combination of the proper use (waste segregation at source and recycling of the waste) of non-burn technologies with the up-gradation of the incinerators as provided in the project design would ensure significant reduction in the emissions of UPOPs due to HCW management.

Although, the project design has not differentiated activities based on gender or age of the involved communities, women and children are expected to have a comparatively higher benefit from activities aimed at reducing the exposure to toxic substances and pathogens.

The establishment of the regulations for the management of SW and HCW along with the establishment of the standards would go a long way to ensure achievement of the objective of reduction in the release of UPOPs not only during the implementation timelines for the project, but also much beyond it.

8.2 Recommendations

Mid-term review questions (see Annex B)

- Corrective actions for the design, implementation, monitoring and review of the project
- Actions to follow- up or reinforce initial benefits from the project
- Proposals for future directions underlining main objectives

Recommendation	Description	Responsible Organization/ Entity
1. Review the Targets for reduction in the emission of UPOPs due to Component 3 (Healthcare waste)	The baseline emissions are 19 gTEq/ Yr. The target for emission reduction is also 19 gTEq (Target 48). This is 100% reduction in the emissions. Complete elimination of the emissions of UPOPs from the medical waste is not feasible. Elsewhere in the 'Project Document' (Page 18) different figure has been provided for the emissions of UPOPs (490.1 gTEq/ yr.). It is recommended that the provisions be reviewed and revised (if required)	Project Team UNDP CO

Recommendation	Description	Responsible Organization/ Entity
2. Identify emergency measures for reduction of UPOPs due to burning of SW and facilitate their implementation	The Outcome 4.2 (Target 73) requires reduction in the emissions of UPOPs of 20 gTEq/yr. by implementing the emergency measures. However, the project design has not provided for identification and implementation of the emergency measures to achieve this Target. Although, the project design has provided for capacity building and awareness creation etc. the emergency measures, there are no provisions in the project budget to support implementation of the emergency measures. It is recommended that the provisions in the project design be made for identification and facilitating implementation of the emergency measures.	Project Team UNDP CO SC
3. Promote alternatives to dumping of Organic Solid Waste	The project is promoting recovery of recyclable materials (metals, plastics, glass, paper) at the source of generation of the 'solid waste'. In the baseline situation recovery of such inert materials was happening at the dumpsites (except for the paper) for the SW. Thus, in the baseline the inert components of the SW were not leading to emissions of UPOPs. Recovery of recyclable materials at the point of generation of waste (instead of the dumpsites) is good, however, it is not leading to any reduction in the emissions of UPOPs as there is no reduction in the quantum (except some waste paper) and composition of the material **getting burned** at the dumpsites. It is recommended that the target (Target 74) for reduction in the emissions of UPOPs due to 3Rs be reviewed and made flexible to include the activities like composting by CBOs at the local level. The project is already promoting alternate methods for disposal of 'decay-able organic solid waste' at the community level by the CBOs using composting/ vermicomposting technologies, but the scale of such activities is very low. It is recommended that the project further promote the composting/vermicomposting at the level of CBOs, to dispose of the organic component of the SW, which doesn't lead to emission of UPOPs and help to achieve the Target of reduction of 3 gTEq/ Yr. due to waste segregation.	Project Team UNDP CO
4. Review of the provisions regarding PRTR	Outcome 1.2: Monitoring activities intensified and strengthened and PRTR database in place, has provided for the laboratory equipment and other such related activities. However, quantification and monitoring of the emissions of POPs and other hazardous chemicals is mostly done using the emission factors, mass balance methods, engineering calculations and activity rates etc. Thus, although strengthening of the capacity in the country to carry out laboratory operations is good, it is not contributing towards the overall objective of the project. It is recommended that the provision of Activities/Targets for Outcome 1.2 be reviewed and if required suitably modified.	Project Team UNDP CO

Recommendation	Description	Responsible Organization/ Entity
5. Promote recycling of plastics in HCW	The project is supporting use of non-burn technologies (Autoclave, Microwave) for disposal of HCW. Thus, the project is leading to disposal of HCW in an ESM. However, as the final disposal of the shredded waste out of the autoclave/microwave is still happening by dumping it at the dumpsites (where it eventually gets burned), there is no reduction in the emission of UPOPs. As per the requirements the use of non-burn technologies for HCW, after treatment the waste needs to be disposed of at a secured landfill or may be used for material recovery. It is recommended that such methods and the technologies be promoted, wherein the final disposal is done by recycling of the plastic parts of the HCW. This would require not only segregation of the HCW (in terms of plastic and other wastes) but also the separation of sharps at the source of the waste generation. In case of HCW plastics, further segregation in terms of types (syringes, bottles, transfusion kits, gloves etc.) would be needed. Segregated component of plastics can then be treated separately using non-burn technologies (autoclave, microwave, gas chambers etc.) and sent for material recovery. It is further recommended that the project, facilitate awareness amongst and demonstration to the stakeholders regarding the practice to recycling of the plastic waste out of HCFs. (please see recommendation 8 as well).	Project Team UNDP CO
6. Extension to Implementation timelines	There was an initial delay in the start of the implementation of the project. Some of the activities involving long procurement processes are presently underway. These activities are important from the viewpoint of the results and effectiveness of the project. The procurement and subsequent implementation of the activities can only be completed if an extension of a year is granted to the project. Further, in the present case there is a In the present case, we may also however emphasize the need to provide hands-on training to the ground staff (hospital staff) on the procedures (like segregation of waste, separation of sharps, etc.) to be followed with the introduction of the non-burn technologies for the management of HCW. This should include the pilot run of the whole procedure to be followed for a sufficient period of time. Experience from other projects on health care waste management also highlight that this period after the receipt of the equipment in the HCFs is crucial and requires sufficient time to ensure full acceptance and good operation of the equipment. It is recommended that a one year no-cost extension to the implementation timelines request be considered, if put forth by the implementation in the last year.	Project Team UNDP CO UNDP RTA
7. Prioritize the hardware procurement activities	There is a provision of USD 1.3 million (out of total GEF funding of about USD 4.5 million) for procurement of HCW management equipment. Considering the long procurement process, it is recommended to prioritize procurement of these equipment to ensure timely and proper utilization of this provision.	Project Team UNDP CO

Recommendation	Description	Responsible Organization/ Entity
	This will also help towards better overall utilization of the budget for the project.	
8. Facilitate implementation of measures/ technologies to dispose of SW in ESM and recycling of plastics in HCW by private sector participation.	There is a high level of interest amongst government counter parts to involve private sector for treatment of SW. The counties where the interventions under the project are being carried out has already initiated efforts in this direction. However, in the absence of any past experience and specific knowledge about the suitable PPP models for treatment of SW, the efforts are not focused. It is recommended that the project facilitate uptake of PPP for disposal of SW and for recycling of plastics in the HCW. In this regard following sequential activities may be undertaken; a) Preparation of a report on the best practices and case studies of PPP for SW in other developing countries having similar situation b) Based on a) and specific conditions of Kenya, recommendations regarding SW disposal technologies and recycling of plastics in HCW and the corresponding PPP model c) Sensitization of the stakeholders (relevant government officials, politicians, representatives of industry etc.) about the findings of a) and b) above d) Study tour of the stakeholders to the countries/locations where such PPP initiatives are working successfully	Project Team
9. More involvement of private sector (e.g. waste recycling firms) in the project activities	The project design has provided for taking on board the private sector (recyclers) to increase the collection of recyclable waste. Somehow, the level of involvement of the private sector in the project is lagging. It is recommended that the level of involvement of the private sector be increased.	Project Team
10. Formalize the dropping of the activity to replace mercury devices with non-mercury devices	For the activity of developing the procedure and guidance for the replacement of mercury devices with non-mercury (Target 29). It was found during the survey that the inventory of Thermometers and Sphygmomanometer with mercury is not much at the HCFs. Accordingly, it was decided by the project team that this activity/Target be dropped from the results frame-work of the project. It is recommended to formalize this, through the SC meeting.	Project Team UNDP CO
11. Hire Technical Advisor for the project	It would help, if the project implementation gets the benefit from the expertise of an international technical expert, hired under a contact for a longer period (part-time) to advise the project team on a regular basis (please see recommendation 11). The project may appoint an international technical expert to help and provide guidance on technical matters.	Project Team UNDP CO

ANNEX A. TERMS OF REFERENCE

TERMS OF REFERENCE：INTERNATIONAL INDIVIDUAL CONSULTANT – UNDP-GEF MIDTERM REVIEW

Location: Nairobi, KENYA
Type of Contract: Individual Consultant
Languages Required: English
Expected Duration of Assignment: 5 weeks
Reference: KEN/IC/2019/016
Application Deadline: 11.59 p.m. on Monday, 03 June 2019 (Kenyan time - GMT+ 3.00)
Project title: Sound Chemicals Management Mainstreaming and UPOPs reduction in Kenya.

1. INTRODUCTION

This is the Terms of Reference (ToR) for the UNDP-GEF Midterm Review (MTR) of the full-sized project titled *Sound Chemicals Management Mainstreaming and UPOPs reduction in Kenya* (PIMS#5361) implemented through the Ministry of Environment and Forestry (Implementing Partner) which is to be undertaken in 2019. The project started on 21st July 2016 and is in its 3ar of implementation. In line with the UNDP-GEF Guidance on MTRs, this MTR process was initiated before the submission of the second Project Implementation Report (PIR). This ToR sets out the expectations for this MTR. The MTR process follows the guidance outlined in the document *Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects*.

2. PROJECT BACKGROUND INFORMATION

The project was designed to protect human health and the environment by managing the risks posed by production, use, import and export of chemicals and reducing / preventing the release of U-POPs and toxic compounds originating from the unsafe management of waste in two key sectors: Health Care Waste and Municipal Waste. These sectors are among the highest priorities identified in the reviewed and updated NIP. On the Health Care Waste Management side, the project will adopt an integrated approach aimed at increasing the proper management of waste within the hospital facilities (increasing segregation, reducing waste generation) and by replacing the dangerous disposal waste modalities currently adopted (open burning or burning in single chamber incinerators) by SC-compliant equipment.

Training will be delivered both at Health Care Facility level and in classroom training events and will be based on the WHO blue book guidance tailored to the country needs. On the municipal waste side, the project intends to reinforce the 3R (Reduce, Reuse, Recycle) economy on two specific waste streams, by enhancing their upstream collection, ensuring the quality of recovered material, and securing access to national market by promoting cooperation with domestic industries. This is for providing a valid alternative to the dumpsite economy and preventing the release in the environment of U-POPs and toxic substance upon open burning of these waste streams. The project also includes a component related to the sound management of chemicals, by implementing activities on U-POPs monitoring, upgrading of the relevant regulation on chemicals, and establishing a PRTR database.

The project partners (Ministry of Health, National Environment Management authority, Government Chemist Department, Water Resources Authority, University of Nairobi, Kenya Association of Manufacturers, Kenya Disaster Concern and Green Belt Movement), in line with their designated roles and responsibilities; support national efforts to mainstream sound chemical management into policies and legislation, capacity build actors in the chemicals utilization value chain, and promote adoption of non-burn technology for the reduction in UPOPs emissions.

The **Objective** of the project is the "Reduction of the release of U-POPs and other substances of concern and

the related health risks, through the implementation of environmentally sound management of municipal and healthcare wastes and of an integrated institutional and regulatory framework covering management of and reporting on POPs."

The project comprises five complementary components, which are cost-shared by the GEF and co- financing as follows: -

Component 1. Streamlining sound management of chemicals and waste into national and county development activities through capacity building of MENR, MOH, county governments of Nairobi, Kisumu, Nakuru and Mombasa and the NGOs.

Component 2. Introducing environmentally sound management of health care waste in selected healthcare facilities; policy and strategic plans to prepare them to adopt BAT and BEP disposal.

Component 3. Demonstration of sound healthcare waste disposal technologies in a selected number of healthcare facilities in each county.

Component 4. Minimizing releases of unintentionally produced POPs from open burning of waste.

Component 5. Monitoring, learning, adaptive feedback, outreach and evaluation.

The project implementation runs from July 2016 to July 2021 with a total budget of USD 25,523,803 of which GEF grant is USD 4,515,000 and a co-finance of USD 21,008,803.

3. OBJECTIVES OF THE MTR

The MTR will assess progress towards the achievement of the project objectives and outcomes as specified in the Project Document and assess early signs of project success or failure with the goal of identifying the necessary changes to be made in order to set the project on-track to achieve its intended results. The MTR will also review the project's strategy, and its risks to sustainability.

4. MTR APPROACH & METHODOLOGY

The MTR must provide evidence-based information that is credible, reliable and useful. The MTR team will review all relevant sources of information including documents prepared during the preparation phase (i.e. PIF, UNDP Initiation Plan, UNDP Environmental & Social Safeguard Policy, the Project Document), project reports (including quarterly reports, Annual Project Review/PIRs), project budget revisions, lesson learned reports, national strategic and legal documents, and any other materials that the team considers useful for this evidence-based review. The MTR team will review the baseline GEF focal area Tracking Tool submitted to the GEF at CEO endorsement, and the midterm GEF focal area Tracking Tool that must be completed before the MTR field mission begins.

The MTR team is expected to follow a collaborative and participatory approach ensuring close engagement with the Project Team, government counterparts (the GEF Operational Focal Point), the UNDP Country Office(s), UNDP-GEF Regional Technical Advisers, and other key stakeholders.

Engagement of stakeholders is vital to a successful MTR. Stakeholder involvement should include interviews with stakeholders who have project responsibilities, including but not limited to Ministry of Health, National Environment Management Authority, University of Nairobi, Kenya Association of Manufacturers, Kenya Disaster Concern and Green Belt Movement as executing agencies, senior officials and task team/component leaders, key experts and consultants in the subject area, Project Board, project stakeholders, academia, local government, health care facilities and CSOs, etc. Additionally, the MTR team is expected to conduct field missions to the project sites in Mombasa, Nairobi, Nakuru and Kisumu.

The final MTR report should describe the full MTR approach taken and the rationale for the approach, making explicit the underlying assumptions, challenges, strengths and weaknesses about the methods and approach of the review.

5. DETAILED SCOPE OF THE MTR

The MTR team will assess the following four categories of project progress. See the *Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* for extended descriptions.

i. Project Strategy

Project design:

- Review the problem addressed by the project and the underlying assumptions. Review the effect of any incorrect assumptions or changes to the context on the achievement of the project results as outlined in the Project Document.
- Review the relevance of the project strategy and assess whether it provides the most effective route towards expected/intended results. Were lessons from other relevant projects properly incorporated into the project design?
- Review how the project addresses country priorities. Review country ownership. Was the project concept in line with the national sector development priorities and plans)?
- Review decision-making processes: were perspectives of those who would be affected by project decisions, those who could affect the outcomes, and those who could contribute information or other resources to the process, taken into account during project design processes?
- Review the extent to which relevant gender issues are included in the project design and implementation. See Annex 9 of *Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* for further guidelines.
- If there are major areas of concern, recommend areas for improvement.

Results Framework/Log-frame:

- Undertake a critical analysis of the project's log-frame indicators and targets, assess how "SMART" the midterm and end-of-project targets are (Specific, Measurable, Attainable, Relevant, Time- bound), and suggest specific amendments/revisions to the targets and indicators as necessary.
- Are the project's objectives and outcomes or components clear, practical, and feasible within it's time frame?
- Examine if progress so far has led to, or could in the future catalyze beneficial development effects (i.e. income generation, gender equality and women's empowerment, improved governance etc.) that should be included in the project results framework and monitored on an annual basis.
- Analyze whether broader development and gender aspects of the project are being monitored effectively. If not, recommend SMART 'development' indicators, including sex-disaggregated indicators and indicators that capture development benefits.

ii. Progress Towards Results

Progress Towards Outcomes Analysis:

- Review the log-frame indicators against progress made towards the end-of-project targets using the Progress Towards Results Matrix and following the Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects; color code progress in a "traffic light system" based on the level of progress achieved; assign a rating on progress for each outcome; make recommendations from the areas marked as "Not on target to be achieved" (red).

Table. Progress Towards Results Matrix (Achievement of outcomes against End-of-project Targets)

Project Strategy	Indicator	Baseline Level	Level in 1st PIR (self-reported)	Midterm Target	End-of-project Target	Midterm Level & Assessment	Achievement Rating	Justification for Rating
Objective:	Indicator (if applicable):							
Outcome 1:	Indicator 1:							
	Indicator 2:							
Outcome 2:	Indicator 3:							
	Indicator 4:							

	Etc.							
Etc.								

Indicator Assessment Key

Green= Achieved	Yellow= On target to be achieved	Red= Not on target to be achieved

In addition to the progress towards outcomes analysis:

- Compare and analyze the GEF Tracking Tool at the Baseline with the one completed right before the Midterm Review.
- Identify remaining barriers to achieving the project objective in the remainder of the project implementation period.
- By reviewing the aspects of the project that have already been successful, identify ways in which the project can further expand these benefits.

iii. Project Implementation and Adaptive Management

Management Arrangements:

- Review overall effectiveness of project management as outlined in the Project Document. Have changes been made and are they effective? Are responsibilities and reporting lines clear? Is decision-making transparent and undertaken in a timely manner. Recommend areas for improvement.
- Review the quality of execution of the Executing Agency/Implementing Partner(s) and recommend areas for improvement.
- Review the quality of support provided by the GEF Partner Agency (UNDP) and recommend areas for improvement.

Work Planning:

- Review any delays in project start-up and implementation, identify the causes and examine if they have been resolved.
- Are work-planning processes results-based? If not, suggest ways to re-orientate work planning to focus on results?
- Is the sequencing of the action the most effective one to reach the intended project objectives?
- Examine the use of the project's results framework/ log-frame as a management tool and review any changes made to it since project start.

Finance and co-finance:

- Consider the financial management of the project, with specific reference to the cost-effectiveness of interventions.
- Review the changes to fund allocations as a result of budget revisions and assess the appropriateness and relevance of such revisions.
- Does the project have the appropriate financial controls, including reporting and planning, that allow management to make informed decisions regarding the budget and allow for timely flow of funds?
- Informed by the co-financing monitoring table to be filled out, provide commentary on co-financing: is co-financing being used strategically to help the objectives of the project? Is the Project Team meeting with all co-financing partners regularly in order to align financing priorities and annual work plans?

Project-level Monitoring and Evaluation Systems:

- Review the monitoring tools currently being used: Do they provide the necessary information? Do they involve key partners? Are they aligned or mainstreamed with national systems? Do they use existing information? Are they efficient? Are they cost-effective? Are additional tools required? If the need is identified, how could they be made more participatory and inclusive?
- Examine the financial management of the project monitoring and evaluation budget. Are sufficient resources being allocated to monitoring and evaluation? Are these resources being allocated effectively?

Stakeholder Engagement:

- Project management: Has the project developed and leveraged the necessary and appropriate partnerships with direct and tangential stakeholders?
- Participation and country-driven processes: Do local and national government stakeholders support the objectives of the project? Do they continue to have an active role in project decision making that supports efficient and effective project implementation?
- Participation and public awareness: To what extent has stakeholder involvement and public awareness contributed to the progress towards achievement of project objectives?
- Coordination: is there sufficient coordination among the different actors and stakeholders involved in the project to maximize positive project results, including whether there is sufficient awareness and capacity among the various stakeholder groups for them to benefit as intended

Reporting:

- Assess how adaptive management changes have been reported by the project management and shared with the Project Board.
- Assess how well the Project Team and partners undertake and fulfil GEF reporting requirements (i.e. how have they addressed poorly-rated PIRs, if applicable?)
- Assess how lessons derived from the adaptive management process have been documented, shared with key partners and internalized by partners.

Communications:

- Review internal project communication with stakeholders: Is communication regular and effective?
- Are key stakeholders left out of communication? Does communication with stakeholders contribute to raise their awareness of project outcomes and activities and investment in the sustainability of project results?
- Review external project communication: Are proper means of communication established or being established to express the project progress and intended impact to the public (is there a web presence, for example? Or did the project implement appropriate outreach and public awareness campaigns?)
- For reporting purposes, write one half-page paragraph that summarizes the project's progress towards results in terms of contribution to sustainable development benefits, as well as global environmental benefits.

iv. Sustainability

- Validate whether the risks identified in the Project Document, Annual Project Review/PIRs and the ATLAS Risk Management Module are the most important and whether the risk ratings applied are appropriate and up to date. If not, explain why.
- In addition, assess the following risks to sustainability:

Financial risks to sustainability:

- Are the financial and economic resources likely to be available once the GEF assistance ends adequate (consider potential resources from multiple sources, such as the public and private sectors, income generating activities, and other funding that is likely to be available for sustaining project's outcomes)?

Socio-economic risks to sustainability:

- Are there any social or political risks that may jeopardize sustainability of project outcomes? What is the risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained? Do the various key stakeholders see that it is in their interest that the project benefits continue to flow? Is there sufficient public / stakeholder awareness in support of the long-term objectives of the project?

Process-related risks to sustainability:

- Are lessons learned documented by the Project Team on a continual basis and shared/ transferred to

appropriate parties who could learn from the project and potentially replicate and/or scale it in the future?

Institutional Framework and Governance risks to sustainability:

- Do the legal frameworks, policies, governance structures and processes pose risks that may jeopardize sustenance of project benefits? While assessing this parameter, also consider if the required systems/ mechanisms for accountability, transparency, and technical knowledge transfer are in place.

Environmental risks to sustainability:

- Are there any environmental risks that may jeopardize sustenance of project outcomes?

Conclusions & Recommendations

The MTR team shall include a section of the report setting out the MTR's evidence-based conclusions, in light of the findings.

Recommendations shall be succinct suggestions for critical intervention that are specific, measurable, achievable, and relevant. A recommendation table should be put in the report's Executive Summary. See the *Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* for guidance on a recommendation table.

The MTR team should make no more than 15 recommendations total.

Ratings

The MTR team include its ratings of the project's results and brief descriptions of the associated achievements in a *MTR Ratings & Achievement Summary Table* in the Executive Summary of the MTR report. See Annex E for ratings scales. No rating on Project Strategy and no overall project rating is required.

Table. MTR Ratings & Achievement Summary Table for the Project: Sound Chemicals Management Mainstreaming and UPOPs reduction in Kenya

Project Strategy	N/A	
Progress Towards Results	Objective Achievement Rating: (rate 6 pt. scale)	
	Outcome 1 Achievement Rating: (rate 6 pt. scale)	
	Outcome 2 Achievement Rating: (rate 6 pt. scale)	
	Outcome 3 Achievement Rating: (rate 6 pt. scale)	
Project Implementation & Adaptive Management	(rate 6 pt. scale)	
Sustainability	(rate 4 pt. scale)	

6. TIMEFRAME

The total duration of the MTR will be **35 working days spread over a time period of 12 weeks** and shall not exceed five months from when the consultant is hired. The tentative MTR timeframe is as follows:

TIMEFRAME	ACTIVITY
03 June 2019	Application closes, and evaluation commences
17 June 2019	Contract MTR Consultant

21June 2019	Prep the MTR Team (handover of Project Documents)
24 to 28 June 2019 (5days)	Document review and preparing MTR Inception Report
5 July 2019 (CO Review period)	Finalization and Validation of MTR Inception Report- latest start of MTR mission
15 to 3 July 2019 (17days)	MTR mission: stakeholder meetings, interviews, field visits
1 to 2 August 2019 (2 days)	Mission wrap-up meeting & presentation of initial findings- end of MTR mission
5 to 16 August 2019 (6 days)	Preparing draft report
26 to 27 August 2019 (2 days)	Incorporating audit trail from feedback on draft report/Finalization of MTR report
16 September 2019 (CO review)	Preparation & Issue of Management Response
12 September 2019	Concluding Stakeholder Workshop (not mandatory for MTR consultant) (optional)
30 September 2019 (3days)	Expected date of full MTR completion

Options for site visits should be provided in the Inception Report.

7. MIDTERM REVIEW DELIVERABLES

#	Deliverable	Description	Timing	Responsibilities
1	**MTR Inception Report**	MTR consultant clarifies objectives and methods of Midterm Review	No later than 1 weeks before the MTR mission: (28 June 2019)	MTR Consultant submits to the Commissioning Unit and project management
2	**Presentation**	Initial Findings	End of MTR mission: (2 August 2019)	MTR Consultant presents to project management and the Commissioning Unit
3	**Draft Final Report**	Full report (using guidelines on content outlined in Annex B) with annexes	Within 3 weeks of the MTR mission: (20 August 2019)	MTR Consultant submits to the Commissioning Unit, reviewed by RTA, Project Coordinating Unit, GEF OFP
4	**Final Report***	Revised report with audit trail detailing how all received comments have (and have not) been addressed in the final MTR report	Within 1 week of receiving UNDP comments on draft: (30 September 2019)	MTR Consultant submits to the Commissioning Unit

*The final MTR report must be in English. If applicable, the Commissioning Unit may choose to arrange for a translation of the report into a language more widely shared by national stakeholders.

8. MTR ARRANGEMENTS

The commissioning unit will contract the consultant and ensure the timely provision of per diems and travel arrangements within the country for the MTR consultant. The principal responsibility for managing this MTR resides with the Commissioning Unit. The Commissioning Unit for this project's MTR is the UNDP Country Office.

The Project Team will be responsible for liaising with the MTR Team to provide all relevant documents, set up stakeholder interviews, and arrange field visits.

9. CONSULTANT QUALIFICATIONS

An independent consultant with the regional experience and exposure to projects and evaluations of natural resource management interventions will conduct the MTR. The consultant will not have participated in the project preparation, formulation, and/or implementation (including the writing of the Project Document) and should not have a conflict of interest with any project-related activities.

Qualifications and evaluation criteria

- Recent experience with result-based management evaluation methodologies; (5 marks)
- Experience applying SMART indicators and reconstructing or validating baseline scenarios; (5 marks)
- Competence in adaptive management, as applied to Chemicals Focal Area; (10 marks)
- Experience working in Kenya/East African Region; (10 marks)
- Work experience in relevant technical areas for at least 10 years; (10 marks)
- Demonstrated understanding of issues related to gender and Chemicals Focal Area; experience in gender sensitive evaluation and analysis; (5 marks)
- Excellent communication skills; excellent mastery of drafting in the English language (10 marks)
- Demonstrable analytical skills; (5 marks)
- Project evaluation/review experiences within GEF/United Nations system will be considered an asset; (10 marks)

Evaluation of Proposal: Only those applications which are responsive and compliant will be evaluated. Offers will be evaluated according to the Combined Scoring method – where the educational background and experience on similar assignments will be weighted at 70% and the price proposal will weigh as 30% of the total scoring. The applicant receiving the Highest Combined Score that has also accepted UNDP's General Terms and Conditions will be awarded the contract.

Only those candidates that meet the minimum level of education and relevant years of experience requirements will be considered for the technical evaluation. The technical evaluation will include a desk review to select the shortlisted candidates. Only candidates obtaining a minimum of 49 points (70%) on technical evaluation will be considered for the Financial Evaluation.

Financial evaluation (maximum 30 points):

The following formula will be used to evaluate financial proposal:
$p = y (\mu/z)$, where
p = points for the financial proposal being evaluated
y = maximum number of points for the financial proposal
μ = price of the lowest priced proposal
z = price of the proposal being evaluated

10. PAYMENT MODALITIES AND SPECIFICATIONS

20% of payment upon approval of the final MTR Inception Report
40% upon submission of the draft MTR report
40% upon finalization of the MTR report

Transport for field work and Living Allowance will be provided to the consultant while in the field at the UN applicable rates.

11. APPLICATION PROCESS

Interested and qualified candidates should submit their applications which should include the following:

1. Detailed Curriculum Vitae
2. Briefdescriptionofapproachtowork/technicalproposalofwhytheindividualconsidershim/herself as the most suitable for the assignment, and a proposed methodology on how they will approach and complete the assignment; (using IC proposal template provided)
3. Offerer's letter to UNDP- template provided for the Financial Proposal that indicates the all-inclusive fixed total contract price and all other travel related costs (such as flight ticket, living allowance etc.), supported by a breakdown of costs, as per template attached to the Letter of Confirmation of Interest template. If an applicant is employed by an

organization/company/institution, and he/she expects his/her employer to charge a management fee in the process of releasing him/her to UNDP under Reimbursable Loan Agreement (RLA), the applicant must indicate at this point, and ensure that all such costs are duly incorporated in the financial proposal submitted to UNDP.

Applications should be sent to consultants.ken@undp.org to reach us not later than 11.59 p.m. on Monday, 03 June 2019 (Kenyan time - GMT+ 3.00). Please quote **"KEN/IC/2019/016 – UNDP-GEF Midterm Review"** on the subject line. Firms are not eligible for this consultancy assignment. Open to individual consultants only.

ANNEX B. MID TERM REVIEW CRITERIA AND QUESTIONS

Contents	Main review criteria and questions
4. Findings: Project strategy 4.1 Project Design • Problem being addressed • Relevance and country drivenness	• What is the problem being addressed by the project and are the underlying assumptions are correct? • Does the project strategy provide the most effective route towards expected/intended results? • Were lessons from other relevant projects properly incorporated into the project design? • How the project addresses priorities of Kenya. Was the project concept in line with the national sector development priorities and plans of Kenya? • Were perspectives of those who would be affected by project decisions, those who could affect the outcomes, and those who could contribute information or other resources to the process, taken into account during project design processes? • To what extent relevant gender issues were raised in the project design. • Are there are major areas of concern, recommend areas for improvement. • Does the project adequately take into account the national realities, both in terms of institutional and policy framework in its design and implementation? • Is the project country-driven? • If the project progress is not good, what changes could have been made (if any) to the project design in order to improve the achievement of the project's expected results during rest of the project implementation period
4.2 Results framework / Log-frame • Log-frame; risks and assumptions; Indicators • Stakeholder participation; linkages with other initiatives; replication approach	• How 'SMART', (Specific, Measurable, Attainable, Relevant, Time-bound), the midterm and end-of-project targets are. • Are the project's objectives and outcomes or components clear, practical, and feasible within its time frame? • Has the progress so far led to, or could in the future catalyse, beneficial development effects (i.e. income generation, gender equality and women's empowerment, improved governance etc.) that should be included in the project results framework and monitored on an annual basis? • Are the broader development and gender aspects of the project are being monitored effectively?
5. **Findings: Progress towards results** 5.1 Attainment of outcomes and outputs • Progress towards outcomes analysis • Remaining barriers to achieve project objectives	• Review the log-frame indicators against progress made towards the end-of-project targets using the Progress Towards Results Matrix, with progress indicators for outcomes/outputs, indicating baseline and target levels, as well as current level and/or reported in PIR linked with ratings for each outcome
5.2 Global environmental and other impacts • GHG emission reduction estimates • Other impacts	• Results in terms of contribution to sustainable development benefits, as well as global environmental benefits (direct and indirect emission reduction) • What are the remaining barriers to achieving the project objective in the remainder of the project? • What are the aspects of the project that have already been successful and what are the ways in which the project can further expand these benefits?
6. Findings: Project	

Contents	Main review criteria and questions
implementation	
6.1 Adaptive management and planning; monitoring and evaluation • Management • Work planning • Reporting • Communications • M&E systems	• *Management:* appropriateness of the institutional arrangement and whether there was adequate commitment to the project? Review overall effectiveness of project management as outlined in the Project Document. Have changes been made and are they effective? Are responsibilities and reporting lines clear? Is decision- making transparent and undertaken in a timely manner? Recommend areas for improvement; Review the quality of execution of the Executing Agency/Implementing Partner(s) and recommend areas for improvement; Review the quality of support provided by the GEF Partner Agency (UNDP) and recommend areas for improvement • *Work planning*: Review any delays in project start-up and implementation, identify the causes and examine if they have been resolved; Are work-planning processes results-based? If not, suggest ways to re-orientate work planning to focus on results? Examine the use of the project's results framework/log frame as a management tool and review any changes made to it since project start. • *Reporting:* Assess how adaptive management changes have been reported by the project management and shared with the Project Board; Assess how well the Project Team and partners undertake and fulfil GEF reporting requirements (i.e. how have they addressed poorly-rated PIRs, if applicable?); Assess how lessons derived from the adaptive management process have been documented, shared with key partners and internalised by partners. • *Communications:* Review internal project communication with stakeholders: Is communication regular and effective? Are there key stakeholders left out of communication? Are there feedback mechanisms when communication is received? Does this communication with stakeholders contribute to their awareness of project outcomes and activities and investment in the sustainability of project results? Review external project communication: Are proper means of communication established or being established to express the project progress and intended impact to the public (is there a web presence, for example? Or did the project implement appropriate outreach and public awareness campaigns?); • *M&E:* Review the monitoring tools currently being used: Do they provide the necessary information? Do they involve key partners? Are they aligned or mainstreamed with national systems? Do they use existing information? Are they efficient? Are they cost-effective? Are additional tools required? How could they be made more participatory and inclusive? Examine the *financial management* of the project monitoring and evaluation budget. Are sufficient resources being allocated to monitoring and evaluation? Are these resources being allocated effectively?
6.2 Stakeholder engagement	• *Project management:* Has the project developed and leveraged the necessary and appropriate partnerships with direct and tangential stakeholders? • *Participation and country driven processes:* Do local and national Government stakeholders support the objectives of the project? Do they continue to have an active role in project decision-making that supports efficient and effective project implementation? • *Participation and public awareness:* To what extent has stakeholder involvement and public awareness contributed to the progress towards achievement of project objectives?
6.3 Finance and co-financing	• Consider the financial management of the project, with specific reference to the cost-effectiveness of interventions. • Review the changes to fund allocations as a result of budget revisions and assess the appropriateness and relevance of such revisions. • Does the project have the appropriate financial controls, including reporting and planning, that allow management to make informed decisions regarding the budget and allow for timely flow of funds?

Contents	Main review criteria and questions
	• Informed by the co-financing monitoring table to be filled out, provide commentary on co-financing: is co-financing being used strategically to help the objectives of the project? Is the Project Team meeting with all co-financing partners regularly in order to align financing priorities and annual work plans?
7. Findings: Sustainability 7.1 Project risks 7.2 Financial risks to sustainability 7.3 Socio-economic to sustainability 7.4 Institutional framework and governance risks to sustainability 7.5 Environmental risks to sustainability	• Whether the risks identified in the Project Document, Annual Project Review/PIRs and the ATLAS Risk Management Module are the most important and whether the risk ratings applied are appropriate and up to date. If not, explain why. • *Financial*: What is the likelihood of financial and economic resources not being available once the GEF assistance ends (consider potential resources can be from multiple sources, such as the public and private sectors, income generating activities, and other funding that will be adequate financial resources for sustaining project's outcomes)? • *Socioeconomic*: Are there any social or political risks that may jeopardise sustainability of project outcomes? What is the risk that the level of stakeholder ownership (including ownership by Governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained? Do the various key stakeholders see that it is in their interest that the project benefits continue to flow? Is there sufficient public/stakeholder awareness in support of the long-term objectives of the project? Are lessons learned being documented by the Project Team on a continual basis and shared/ transferred to appropriate parties who could learn from the project and potentially replicate and/or scale it in the future? • *Institutional*: Do the legal frameworks, policies, governance structures and processes pose risks that may jeopardise sustenance of project benefits? • *Environmental*: Are there any environmental risks that may jeopardise sustenance of project outcomes?
8. Conclusions and recommendations 8.1 Conclusions • Summary of main findings and of ratings; statements on strengths and weaknesses • Remaining barriers 8.2 Recommendations	▪ Identify remaining barriers to achieving the project objective in the remainder of the project, and by reviewing the aspects of the project that have already been successful, identify ways in which the project can further expand these benefits ▪ MTR Ratings & Achievement Summary Table will be provided, summarising the ratings on a) results, b) implementation and adaptive management, 3) sustainability with a short description of the rating's justification ▪ 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

ANNEX C. DOCUMENTS REVIEWED

Project documents	
	Project Document
	CPD 2018-2022
	Project Fact Sheet
	CEO Endorsement
	PIF
	STAP Review
	United Nations Development Assistance Framework UNDAF
	Project Inception Workshop Report
PIRs	
	PIR 2018
	PIR 2019 Draft
Audit Reports	
	Deloitte HACT Audit Report 2017
	PWC Audit draft Report 2018
Sample Back to Office Reports	
	Back to office Report Kisumu
	UNDP Mombasa CBOs
	Zanzibar
	Report of Visit to Mwakirunge Dumping Site
PSC Meetings Minutes	
	PSC (1) MINUTES
	PSC (2) MINUTES
	PSC (3) MINUTES
	PSC (4) MINUTES
	PSC (5) MINUTES
	PSC (5) MINUTES
	PSC (6) MINUTES
	PSC (7) MINUTES
Technical Committee Meetings	
	TCM Minutes 18th August 2017.
	TCM Minutes2 1.01.2019
	TCM Minutes 25.01.2017
	TCM Minutes 9th10th July 2018
	TCM Minutes 11.12.2017
	TCM Minutes 31dec 2016
	TCM Report4th 6th October 2017
	TCM Report 18th 19thJuly 2019
	TCM Report 18th 19th December 2017
	TCM Report 29th 30th October 2018
	TCM Report August 2017
Annual Progress Reports	
	Annual Progress Report 2017
	Annual Progress Report 2018
Quarterly Work plans	
	Q1WP 2017
	Q1WP 2018
	Q1WP 2018
	Q1WP 2019
	Q2WP 2017
	Q2WP 2018
	Q2WP 2019
	Q2WP 2018

	Q3WP 2017
	Q3WP 2018
	Q3WP 2019
	Q4 WP 2017
	Q4WP 2018
CDR	
	Jan June 2017
	Jan Dec 2016
	Jan Dec 2018
	JAN JUNE 2017
	Jan June 2019
Annual Work plans	
	2016 Annual Work plan and Budget
	2017 Annual Work plan and Budget
	2018 Annual Work plan and Budget
	2019 Annual Work plan and Budget
Others	
	HCWM Sensitization presentation
	Health Care Waste Management Power Point
	Kilifi County Overview of Waste Management
	Kwale County Waste Management Presentation Mombasa
	Chemicals Roadmap Revised
	Workshop Report Gaps Analysis
	Tender for GCMS Water Resources Authority
	Kenya National Chemicals and Hazardous Waste Management
	University dialogue on integrating chemicals management in Curriculum
	Draft Chemical Regulation - Final Draft
	Gaps Analysis workshop report
	Institutional Needs Analysis for Chemicals and Waste Management in Kenya
	Needs Assessment Report September 2017
	Project training Needs Assessment Report
	Draft TORs for NCCC
	Institutional Needs Analysis for Chemicals and Waste Management in Kenya
	Establishment of chemical MEAs Unit in the Ministry of Environment and Natural Resources
	Healthcare Waste Management Facility Assessment Reports
	RFP Finalization of Health Care Waste Management stagey documents and guidelines
	Review of National Guidelines for Safe Management of Health Care Waste
	Tender notice for Health Care Waste Commodities
	Awareness on environmentally Sound Solid Waste Management
	Framework for take back scheme for PETs
	RFP - Communication stagey Consultant
	Chemicals Awareness and Enforcement workshop report
	BRS Preparatory Meeting Egerton
	Report on updating Annexes on BRS Dec 2018
	Institutional Needs Analysis for Chemicals and Waste Management in Kenya
	National Dialogue on Integrating Chemicals MEAS in Research
	University 2nd workshop report October 2017
	Informal Sector engagement report
	Training for WRA on Selection of Toxic Chemicals that Need Monitoring in Water
	Chemicals Roadmap Revised
	Workshop on Policy Gaps Analysis
	National Chemicals Coordination Committee Report
	Sensitization of Public Health Officers on Mercury and Lead poisoning program - Mombasa
	Chemicals Regulations Validation report 2019

	Revised National Waste Policy April 2019
	Chemicals Regulations Review Workshop report
	Training County Directors of Environment Officers
	HCWM aiming materials packaging & M&E system development
	Project aiming Needs Assessment Report 1
	Review of National Guidelines for Safe Management of Health Care Waste 1
	Report on High Level Meeting Held at KEFRI
	HCWM PPP Workshop
	GBM Technical Review for Sensitization and Awareness Material Report
	GBM GOK Project KDF aiming and Awareness Report
	WOMEN DIALOGUE REPORT MSA
	KMA Solid Waste Management Report 21 24 Jun
	SWM Inter-county consultative Report Nakuru
	Nakuru Stakeholders Workshop
	Kenya Manufacturers Nakuru Waste forum
	Industry field visit to EAPCC
	Industry field visit to EPZA
	Industry field visit
	Industry field visit to EPZA
	KMA Solid Waste Management Report
	MIOG Preconference Workshop Proceedings Report
	Signed Framework of Cooperation on Implementation of the 'Take Back Scheme of PET Bottles'

ANNEX D. LIST OF PERSONS INTERVIEWED, MISSION AGENDA AND ITINERARY

Date	Item	Venue	Responsible
Sun 18th Aug 2019	Arrival of Dinesh Aggarwal		
Mon 19th Aug 2019			
	Meeting with EECCU – Project Officer	UNDP Office	Mr Washington Ayiemba
	Consultations with Implementing Partner/Project Executive/Director (ME&F) Management Unit Ministry of Environment, NHIF - Nairobi)	NHIF Building	Mr Washington Ayiemba Dr Ibrahim Dr Lucy
Tue 20th Aug 2019	Consultations with Responsible Parties/Beneficiaries (Nairobi) (PMU)/NEMA		Mr Francis Kihumba (PMU) Ms. Georgina
	Green Belt Movement (NGO)		Mr Milton Mwangi – Finance Mr Paul Thiongo – Project office Dr Karenge – Head Mr Georgina Wachuka – Regulatory Affairs Office
	Ministry of Health		Mr Rose K Mokaya – Healthcare Waste/ Climate Change and Health Unit Ms Pauline Ngari – Occupatiuonal Health and Safety Unit Mr Omandi Gamaliol – Occupational Health and Safety
	Field visits to beneficiaries	Component 2,3 and 4 Mama Lucy Hospital Dandora Dumpsite	Mr. Francis Kihumba (PMU) MoH Gamaliel Omondi GBM – Wycliffe Matika
	Leave for Mombasa		Mr. Ayiemba/Kihumba
Wen 21st Aug 2019	Consultations with Responsible Parties/Beneficiaries Consultations	NEMA Director County of Mombasa Department of Environment	Mr. Washington Ayiemba
	Consultations with Responsible Parties/Beneficiaries	County Health Office Coast general Hospital	Mr Francis Kihumba
Thu 22nd Aug 2019	Field visits to beneficiaries	Kibarani Dumpsite Kibarani Site	Mr Francis Kihumba
	Department of Environment, Waste Management and Energy		Mr Godffrey Nyongesa Nato, County Executive Member
	Community Group (Big Ship) - NGO		Mr Basco Jumma- Director Mr James Katana – Technical Advisor
	Mombasa, Ministry of Health office		
	Coast General Provincial Hospital		
	Mombasa Dumpsite		
Fri 23rd Aug 2019	Travel to Nairobi - Nakuru		
	Consultations with Responsible Parties/Beneficiaries		
Sat 24th Aug 2019	Nakura County, Environment Energy and Natural Resources		Mr Grace Karanja Mr Kennedy Kirna Mr Omondi Gamaliel

Date	Item	Venue	Responsible
	Community Based Organisation (Composting Site)		Ms Martin Waweru Ms Mildred Day
	CBO Nakaru Materail Recovery Facility		
Sun 25th Aug 2019	Field work in Naivasha Spiritual connections		Mr G Omondi Ms Mercy Kimani
Mon 26th Aug 2019	Consultations with Responsible Parties/Beneficiaries	Nakuru County Environment-Nakuru NEMA	Ms Mercy Kimani Mr. Saisi – Director NEMA
	Field visits to beneficiaries	Nakuru Provicial Hospital	Mr. Kiogora – CO Health Omondi
	Travel to Kisumu		
Tue 27th Aug 2019	Consultations with Responsible Parties/Beneficiaries	County Government of Kisumu Department of Health and Environment	Mr Francis Kihumba
Wed 28th Aug 2019	Field visits to beneficiaries	Kachok Dumpsite Lake Victoria Fish Landing Sites Lake Victoria Labs	Mr.Ken Koyooh Mr Tom Togo
	Travel to Nairobi		
Thu 29th Aug 2019	Meeting with EECCU – Project Officer, Programme Analyst, Team Leader	UNDP OFFICE	Ms. Evelyn Koech
	Meeting with the project team Data/ Documents collection		PMU/Project Team
	Consultant collation of information gathered and any gaps	PMU	Ms. Nancy Narasha Mr. Francis Kihumba
	Data Analysis and preparation for debriefing by the MTR consultant		
Fri 30th August 2019	Meeting with the Project Manager		Ms. Mayiani Saino
	Debrief to EECCU and Partners on consultations	Utalii Hotel	Nairobi Based Partners
	Closure of mission and Departure of Dinesh Aggarwal		

ANNEX E. RATING SCALE /DEFINATION

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 (MU)	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 midterm targets, and is not expected to achieve any of its end-of-project targets.

Ratings for Project Implementation & Adaptive Management: (one overall rating)		
6	Highly Satisfactory (HS)	Implementation of all seven components – management arrangements, work planning, finance and co-finance, project-level monitoring and evaluation systems, stakeholder engagement, reporting, and communications – is leading 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 seven components is leading 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 seven components is leading to efficient and effective project implementation and adaptive management, with some components requiring remedial action.
3	Moderately Unsatisfactory (MU)	Implementation of some of the seven components is not leading to efficient and effective project implementation and adaptive, with most components requiring remedial action.
2	Unsatisfactory (U)	Implementation of most of the seven components is not leading to efficient and effective project implementation and adaptive management.
1	Highly Unsatisfactory (HU)	Implementation of none of the seven components is leading 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 into the foreseeable future
3	Moderately Likely (ML)	Moderate risks, but expectations that at least some outcomes will be sustained due to the progress towards results on outcomes at the Midterm Review
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

ANNEX F. CONSULTANT CODE OF CONDUCT FORM

Evaluators/reviewers:

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, minimise 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.

Evaluation/reviewer Consultant Agreement Form

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

06 November 2019

Name of Consultant: Dinesh Aggarwal

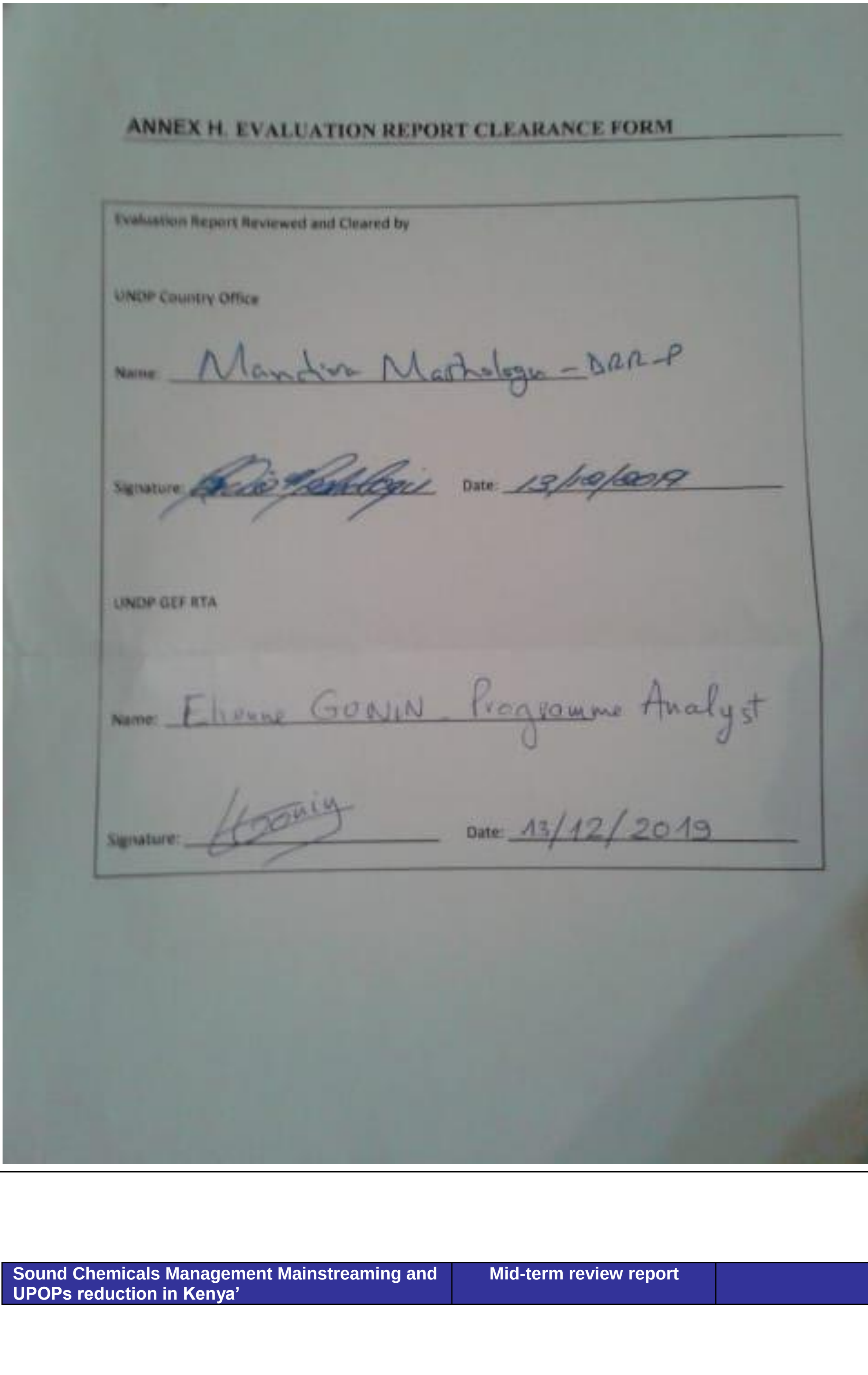
Name of Consultancy Organisation (where relevant): _____

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

ANNEX G. AUDIT TRAIL

As per the requirements the Audit Trail is being submitted as a separate file

ANNEX H. EVALUATION REPORT CLEARANCE FORM



ANNEX H. EVALUATION REPORT CLEARANCE FORM

Evaluation Report Reviewed and Cleared by

UNDP Country Office

Name: Mandisa Mashologu – DRR-P

Signature: ____________ Date: 13/12/2019

UNDP GEF RTA

Name: Etienne GONIN Programme Analyst

Signature: ____________ Date: 13/12/2019