



“Elimination of obsolete pesticide stockpiles and addressing POPs contaminated sites within a Sound Chemicals Management Framework in Armenia”



Mid-Term Review Report

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Implementing Partner:	Ministry of Nature Protection (MNP) & Ministry of Emergency Situations (MES)
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Submitted by:
Jean-Joseph Bellamy

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List of Abbreviations and Acronyms

AHHE	Armenian Women for Health and a Healthy Environment
APR	Annual Progress Report
AWP	Annual Work Plan
CDR	Combined Delivery Report
CPAP	Country Programme Action Plan
CSO	Civil Society Organization
DAC	Development Assistance Committee
DOA	Delegation Of Authority
DPS	Direct Project Service
EHS	Environment, Health and Safety
EIA	Environmental Impact Assessment
ENGO	Environmental Non-Governmental Organization
GDP	Gross Domestic Product
GEF	Global Environment Facility
HW	Hazardous Waste
M&E	Monitoring and Evaluation
MES	Ministry of Emergencies Situations
MNP	Ministry of Nature Protection
MOA	Ministry of Agriculture
MTEF	Medium-Term Expenditures Framework
MTR	Mid-Term Review
NGO	Non-Governmental Organization
NIM	National Implementation Modality
NIP	National Implementation Plan
OECD	Organization for Economic Co-operation and Development
ODS	Ozone Depleting Substance
OP	Obsolete Pesticide
OSCE	Organization for Security and Co-operation in Europe
PAC	Project Advisory Committee
PC	Project Coordinator
PMB	Project Management Board
PIR	Project Implementation Review/Report
PIU	Project Implementation Unit
POPs	Persistent Organic Pollutants
PPG	Project Preparation Grant
RBM	Results Based Management
RCU	Regional Coordination Unit
SC	Stockholm Convention
SMART	Specific, Measurable, Attainable, Relevant and Time-bound
TORs	Terms of Reference
UN	United Nations
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNEG	United Nations Evaluation Group
USD	United States Dollar
WBS	Work Breakdown Structure

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DISCLAIMER

This report is the work of an Independent Evaluator and does not necessarily represent the views, or policies, or intentions of the United Nations Development Programme (UNDP) and/or of the Government of Armenia.

1. Main Conclusions and Recommendations¹

1.1. Background - Introduction

This report presents the findings of the Mid-Term Review (MTR) of the UNDP-supported-GEF-Financed-Government of Armenia Project “*Elimination of obsolete pesticide stockpiles and addressing POPs contaminated sites within a Sound Chemicals Management Framework in Armenia*”. This MTR was performed by an Independent Evaluator, Mr. Jean-Joseph Bellamy on behalf of UNDP.

Armenia is a small landlocked country located in the Caucasus region of South-Eastern Europe, bordering Georgia in the North, Azerbaijan in the North-East, East, and South-West, Iran in the South and Turkey in the South and West. Armenia gained independence in 1991. Similar to other states of the Former Soviet Union, it still suffers from the environmental legacies accumulated during the Soviet time. Armenia with its highly developed agricultural sector (19% of GDP) had among the highest application rates of pesticides, particularly organochlorine pesticides in the Soviet Union. One leading manifestation of historical environmental legacies and source of continuing possible health risk and environmental degradation is that Armenia retains stockpiles of obsolete pesticides and associated contaminated sites.

Two main legacies/issues are the object of this project: the Nubarashen obsolete pesticide (Ops) burial site and the community based inherited storehouses and stockpiles of obsolete pesticides:

- **Nubarashen Obsolete Pesticide Burial Site:** It is located on the South-East edge of Yerevan in the Nubarashen district. It occupies about 0.8ha of fenced area enclosed on three sides by concrete runoff drains and two run off trenches located 10m on the down slope side. It is estimated that the site contains about 674m³ of pure pesticide, which contaminated thousands m³ of soil at various level of contamination throughout the site.
- **Obsolete Pesticide Storehouses and Stockpiles:** There is an estimated 24 sites containing obsolete pesticides residuals throughout Armenia communities representing an estimated quantity of around 150T of obsolete pesticides waste.

The long-term solution to address these 2 issues of obsolete pesticides accumulation is to ensure the capture, secure prevention of any potential release, and eliminate/treat the POPs pesticides stockpiles. However, important barriers exist in Armenia to eliminate POPs pesticides and obsolete pesticides. They include:

- Institutional barriers: inadequate role of local authorities, overriding licensing and environmental approval, processing imperatives, etc.
- Legal and regulatory barriers: overlaps, conflicts and gaps
- Low level of Information and awareness related to POPs pesticides and obsolete pesticide issues.
- Deficits in technical capacity and supporting infrastructure
- Lack of effective financial resources

This project has been developed to address the 2 legacy issues and these existing barriers. Its objective is “***to protect health and environment through elimination of obsolete pesticide stockpiles and addressing contaminated sites within a sound chemicals management strategy***”. It will be achieved through the delivery of four components:

1. Capture and containment of obsolete pesticide stockpiles and wastes
2. Obsolete pesticide stockpile and waste elimination
3. Institutional and regulatory capacity strengthening for sound chemicals management and contaminated sites
4. Monitoring, learning, adaptive feedback, outreach, and evaluation

¹ Conclusions and Recommendations are in Chapter 1 with a brief background section. It is structured as an Executive Summary but also a stand-alone section presenting the highlights of this final evaluation.

Table 1: Project Information Table

Project Title:	Elimination of obsolete pesticide stockpiles and addressing POPs contaminated sites within a Sound Chemicals Management Framework in Armenia		
UNDP Project ID (PIMS #):	4905	PIF Approval Date:	February 15, 2012
GEF Project ID (PMIS #):	4737	CEO Endorsement Date:	December 18, 2014
Award ID:	00081909	Project Document (ProDoc) Signature Date (date project began):	May 26, 2015
Country(ies):	Armenia	Date project manager hired:	August 17, 2015
Region:	CIS	Inception Workshop date:	December 4, 2015
Focal Area:	Chemicals	Midterm Review date:	March-April 2018
GEF-5 Strategic Programs:	Phase out POPs and reduce POPs releases	Planned closing date:	April 26, 2019
Trust Fund:	GEF	If revised, proposed closing date:	November 26, 2020
Executing Agency:	Ministry of Nature Protection (MNP) and Ministry of Emergency Situations (MES).		
Other Execution Partners:			
Project Financing	at CEO endorsement (USD)	at Midterm Review (USD)	
(1) GEF financing:	4,700,000	4,700,000	
(2) UNDP contribution:	200,000	200,000	
(3) Government:	16,020,000	16,020,000	
(4) Other Partners:	3,064,384	3,064,384	
(5) Total co-financing [2+3+4]:	19,284,384	19,284,384	
Project Total Cost [1+5]:	23,984,384	23,984,384	

This mid-term review report documents the achievements of the project and includes four chapters. Chapter 1 presents the main conclusions and recommendations; Chapter 2 presents an overview of the project; Chapter 3 briefly describes the objective, scope, methodology, evaluation users and limitations of the evaluation; Chapter 4 presents the findings of the evaluation and relevant annexes are found at the back end of the report.

1.2. Conclusions

Project Strategy

a) The relevance of the project in Armenia has been growing since the formulation stage.

Addressing the risks of the Nubarashen burial site and of the obsolete pesticide stockpiles stored in storehouses throughout Armenia is becoming a higher national priority. It is now clearly stated in several national programmes and strategies – including in the “*Program of the Government of the Republic of Armenia – 2017-2022*”, the government decree #49 (2016), and in the updated version of the NIP (2016). Despite that no budget line is yet allocated from the national budget to address this priority, the strategic projection is that the government may finally allocate or contribute funds from the national budget in the near future. However, when considering that the MTEF has a three-year cycle and that Armenia is under severe fiscal restraints, it will require a strong promotion of the “business case” of addressing these issues in order to obtain the necessary cash co-financing in a timely fashion.

b) The project document is complex to follow, not easy to understand and difficult to be used as a “blueprint” to implement the project.

The project document is long and somewhat cumbersome to follow. The structure of the project as documented in the project document is complex. It includes 3 components divided into 9 outcomes, which are further divided into 34 outputs and 28 activities. The result of this structure is also a complex M&E system with 32 indicators and 48 targets to measure the progress made toward the project objective and outcomes. These numbers are part of the complexity to understand this project, there are too many “parts”. However, it could be detailed in a much simpler way. The project has 3 easy-to-understand component, which could have been

turned into 3 outcomes further divided into 9 outputs. A simpler structure would have provided a better “blueprint” for the implementation of the project; facilitated the monitoring of the project by the project implementation team; and provided a better documentation to be understood by stakeholders.

c) A type of project which would benefit from using additional project management tools such as WBS, Gantt chart and critical path.

This type of project has a strong engineering component and it needs to be managed more similarly to a civil engineering project (as opposed to a typical biodiversity or land degradation project) with the use of a project management software offering features such as WBS, Gantt chart and Critical Path (*the longest sequence of activities in a project plan which must be completed on time for the project to complete on due date*). It would provide critical management information on the timeline to implement the project and its minimum duration. It would facilitate the analysis of the implications of any delays on the overall timeline of the project and provide up-to-date information to act quicker in mitigating these delays whenever possible. It would help the project implementation team with instant up-to-date timing information about the project, including an easier/quicker analysis of different scenarios.

Progress Towards Results

d) So far, the project has made little progress toward its objective and outcomes mostly due to critical delays of tendering processes and selection of a new hazardous waste temporary storage site.

As of end of February 2018, the elapsed time to implement the project is at 69% of the total four-years. Due to delays in tendering processes, the project has not progressed substantially towards its objective and outcomes. It lost almost one year in selecting/recruiting a firm to conduct a full assessment of the Nubarashen burial site and to design how to clean-up the site. Then, the Kotayk site selected during the PPG phase to be the location for constructing a hazardous waste temporary storage site was abandoned due to negative reactions from local communities and NGOs. The Ministry of Emergency Situations has been looking into identifying another site for this purpose². All these unexpected events delayed the implementation of the project and affected its effectiveness so far. The good news is that despite an elapsed time of 69%, the prudent approach to engage project expenditures has resulted in the disbursing of only 9.3% of the GEF grant as of the end of February 2018. Consequently, the GEF financial resources are still mostly available for the implementation of the project.

e) The implementation is at a cross-road, facing three critical issues: co-financing, identify and construct a temporary storage site, and identify a transit route and receive permits

Today, the comprehensive assessment of the Nubarashen burial site is almost completed and the design of site clean-up works is close to completion. The project now disposes of good information to undertake the clean-up phase. However, to move forward the project faces three critical issues, which need to be resolved:

- i. As of March 2018, despite the government commitment made at the outset of this project, no cash co-financing is available yet. Moreover, the prospect of getting cash in the coming 1-2 years from the government is very limited; mostly relying on the operational budgets of the ministries (MNP and MES) and municipalities involved in the clean-up. Yet, some “critical” tasks are to be funded by other sources of funding (i.e. not by the GEF grant). Without cash co-financing, the project cannot be implemented as per its design.
- ii. Since the beginning of this MTR, the government approved a new site² for constructing a temporary storage site. The construction of a temporary storage site is a “critical” task; i.e. without this temporary storage facility, the Nubarashen site cannot be cleaned-up;
- iii. No clear routes and permits have been yet identified for transporting and disposing of hazardous material (Category 1). When considering the geographical position of Armenia, it is a complex set of financial, technical and political issues to be resolved;

² A new site (Nairit) was recently approved by the Government of Armenia through the Decree N383-A dated April 5, 2018.

Project Implementation and Adaptive Management

f) The management arrangements are adequate but the PMB is not at the center of the decision-making process and the link between the project and the Inter-Agency Committee on Implementation of Stockholm Convention (SC) is weak.

As the executive decision-making body of the project, the PMB does not seem to be the decision-making center and the link between the project and the Inter-Agency Committee on Implementation of SC is weak. Despite that the PMB meets twice a year, too much implementation responsibilities seem to reside with the Project Coordinator and the project is much viewed as the “UNDP Project”. It is certain that as the Coordinator, the PC plays a key role in the implementation of the project. Through her role of coordinating the project, the PC disposes of the overall knowledge that is being accumulated by the project and, due to her position, is in a better cross-institution position than any other line stakeholders. However, too much decision-making is concentrated at her level, instead of at the PMB level.

g) Having the project office located at UNDP contributes to a poor visibility of the project.

The location of the project office at UNDP is not helping to render the project visible. Moreover, it contributes to the perception that it is the “UNDP Project” and preventing the project to be fully “owned” by key government agencies. If the project office would be located in one government agency, it would contribute to more visibility of the project and over time to a greater government ownership.

h) So far, the project has expended close to USD 500k from the GEF grant but no cash co-financing is yet available.

The Delegation of Authority (DOA) between UNDP-HQ and UNDP-CO included a conditionality of an initial period of implementation of 18 months and a maximum amount to be expended from the GEF grant of USD 500k in order to complete all assessments and obtain the necessary cash co-financing. As it stands today, the project is reaching this limit of USD 500k. Most of the tasks indicated in the DOA have been completed, however, no cash co-financing availability can be reported yet. It is not clear what will happen if the cash co-financing is not made available on time. However, if major changes are required, including co-financing arrangements, the DOA states that it may require these changes to be reviewed by the GEF Council with the “*potential Project’s cancellation by GEF and/or by UNDP-MPU/Chemicals*” if risks are “*considered unacceptable*”.

i) As of the end of February 2018, only 9.4% (USD 440k) of the GEF grant has been expended versus an elapsed time of 69%; confirming the slow progress in implementing the project.

Only 9.4% of the GEF grant has been disbursed at the end of February 2018. Despite a very low disbursement amount, it is in line with what happened with the implementation of the project. Due to delays, the project lost about a year with two tenders that were cancelled and re-advertised. The project is only finishing its assessment and site clean-up works design phase. The good news is that due to an overall prudent approach to engage project expenditures in line with the implementation of activities, there is a remaining budget of USD 4.26M (about 91%). No expenditures have been expended on the second component that is to finance the clean-up/treatment/disposal /containment of the Nubarashen burial site. The entire GEF grant budget of this second component is USD 3.39M, representing about 72% of the entire GEF grant.

j) No cash co-financing is yet available to finance some project activities.

A total of about USD 19.3M was to be co-financed, representing 80% of the total budget to finance the entire project. The government of Armenia committed to co-finance over USD 16M or 83% of the total co-financing commitments, including both cash and in-kind co-financing. As per the design of this project, cash co-financing is needed to finance or co-finance some specific project activities. A high level of co-financing for most expected outputs was planned. It includes the co-financing of 100% for activities such as packaging, removal, destruction and clean-up of obsolete pesticide stockpiles from community storehouses (Outcome 1.3). Under Outcome 2.1, the disposing of Category 1 hazardous material is to be mostly funded by the GEF grant (93%); however, the treatment of Category 2 material is to be funded at 78% by other sources. Identifying

cash co-financing is critical to proceed with the clean-up phase; the central part of the project.

k) The complex project structure led to a convoluted monitoring system including 32 indicators and 48 targets.

There are too many indicators (32) and targets (48) to monitor the progress made by the project, rendering the M&E function convoluted. As a consequence of these numerous indicators and targets, progress reports are long and not reader-friendly; the PIR-2017 contains 34 pages to report on progress made toward the objective and outcomes. These reports do not present clearly and concisely the progress made to “*eliminate obsolete pesticide stockpiles and addressing contaminated sites within a sound chemicals management strategy*”.

Sustainability

l) A cumbersome analysis of risks but also with good mitigation measures.

The discussion of risk management in the project document is somewhat cumbersome. It contains a list of 5 risks presented as an annex (2 were added during the inception phase). These risks are those which are monitored by the project implementation team and reported – if critical – in the annual progress reports. However, the discussion of risks involved in implementing the project presents another set of 5 risks. This latter set of risks is much more appropriate when considering the status of the project and they have good proposed mitigation measures. They include the risk of non-availability of cash co-financing; difficulties to export (transit) Category 1 material; issue to identify a hazardous waste temporary storage site; difficulties to treat Category 2 material; and the risk of release to the environment and human exposure, including difficulties to contain the site after excavation.

It was also noted that due to the nature of this project, the concept of sustainability, as defined in the UNDP-GEF guidance, is somewhat different. The risks are not really about sustainability of project achievements. The risks are rather on obtaining the necessary financing (including co-financing), particularly to implement activities under Component 2 and the risks of release in the environment during the handling phase of this contaminated material with possibly human exposure, which could lead to public health and environmental issues. Overall, if the project is completed successfully, Category 1 material will have been disposed of, Category 2 will be treated and contained and the remaining Category 3 material at the Nubarashen burial site properly contained; hence no further risks of contamination.

1.3. Recommendations

Based on the findings of this mid-term review, the following recommendations are suggested.

Recommendation 1: It is recommended to extend the project to November 2020.

Issue to Address

Following the delays, the project lost about one year of implementation. Furthermore, the development of a hazardous waste temporary storage site is taking longer than expected due to the rejection of the Kotayk site by surrounding communities and NGOs. The project is still waiting for a new site being identified before it can start its assessments (EIA) and hopefully construct/renovate it to international standards to be able to securely store hazardous chemical waste material.

When considering all the remaining tasks to complete the project, except unforeseen development, the full completion of the project by May 2019 should be ruled-out; it is just not possible. In the meantime, the recent advance with the assessment of the Nubarashen burial site is providing the project with critical information to proceed with the clean-up phase. It is recommended to extend the project to November 2020. However, this extension should also be timed with the final completion of all critical tasks of securely packaging, treating, disposing of, and containing the remaining contaminated material. It goes without saying that the project cannot stop the process in the middle of the cleaning-up phase; the environmental risk would be enormous. The timing of the project needs to consider this reality.

Recommendation 2: It is recommended to organize a high-level meeting in order to provide a forum for high level discussions on how to address/resolve the current issues.

Issue to Address

The implementation of the project is at a cross-road. The completion of the assessment of the Nubarashen burial site and the design of clean-up works has provided the project with critical information to prepare the clean-up phase; the central part of this project that will make it a success or a failure. However, currently there are three key issues that need to be resolved in order for the project to proceed with this clean-up phase: (i) identify the amount of cash co-financing necessary and its sources to co-finance the clean-up phase/disposal/restoration phase; (ii) construct a temporary hazardous waste storage facility; and (iii) identify a route for exporting highly contaminated material (Category 1) to be disposed of. The coming months are critical for the project. In order to be able to address the above issues that are preventing the project to move ahead, it is recommended to prepare and organize a high level meeting to present the current status of the project, its issues and the requirements to move ahead. It would provide a forum for high level discussions (Ministerial if possible and UNDP Management) on how to address these issues and hopefully actions leading to the resolve of these issues. This event would be executed in two phases: (1) the project implementation team should prepare a strategic document focusing on a roadmap to undertake the clean-up phase. Using the information available, this roadmap should include key milestones, cash needed – both GEF grant and other sources – and key responsibilities; (2) organize a high level meeting with the PMB in collaboration with the Inter-Agency Committee on the Implementation of the SC where the strategic document will be presented, discussed and hopefully identify the necessary actions to move ahead.

Recommendation 3: It is recommended to constitute an “Executive” Committee as a sub-set of the PMB with quarterly meetings.

Issue to Address

Two PMB meetings per year are not enough to establish this Board as the decision-making center of the project. Too much implementation responsibilities seem to reside with the Project Coordinator. Recognizing that the Project Coordinator plays a key role in the implementation of the project, particularly with its day-to-day implementation, too much decision-making is concentrated at her level and a more distributed decision-making process is needed. It is recommended to establish an Executive Committee as a sub-set of the PMB with the following key members: MNP, MES, Municipality of Yerevan and UNDP. This committee should meet at a minimum once a quarter, and the Project Coordinator should ensure the secretariat role as an ex-officio of this committee. The aim is to re-distribute and share the decision-making process among key stakeholders. The committee would report at each PMB meeting.

Recommendation 4: It is recommended to strengthen the link between the project through the PMB and the Inter-Agency Committee on the Implementation of the SC.

Issue to Address

The Inter-Agency Committee on the Implementation of the SC was created in 2010. It is a key government instrument to oversee the management of chemicals in Armenia within the context of the Stockholm Convention obligations for Armenia. It is an excellent government instrument, which could serve as a vehicle for facilitating institutional stakeholder engagement and coordination at a high government level but also to increase the visibility of the project. The link between the PMB and this Committee exist but it needs to be strengthened. It is recommended to organize more regular presentations on the progress of the project – including issues faced by the project - at the meetings of the Committee and as much as possible engage these key decision-makers in the process of implementing the project.

Recommendation 5: It is recommended to update the DOA to be in line with the current status of the project and its options to move ahead.

Issue to Address

The DOA set a timeframe of 18 months and a budget cap of USD 500k to conduct assessments and plan for the clean-up phase; including the identification of the required cash co-financing. It is not really clear what will happen if the co-financing is not made available on time but the DOA states that if major changes are required, including co-financing arrangements, it may require the review of these changes by the GEF Council. Today, 33 months have passed, the project expended about USD 440k of the GEF grant and the DOA has never been updated. In parallel to the recommendation 1 and 2, it is recommended that this DOA be reviewed

and updated accordingly to be in line with the overall implementation strategy of the project.

Recommendation 6: It is recommended to locate the project office within a related government department.

Issue to Address

The project lacks visibility with partners. Having the project office located at the UN House is not helping and contributes to the fact that this project is often referred to as the “UNDP Project”. In order to increase the visibility of the project it is recommended to review the location of the office and as much as possible, relocate the office within a related government department/agency.

Recommendation 7: It is recommended to streamline the number of performance indicators and targets.

Issue to Address

With 32 performance indicators and 48 targets, the M&E system is too complicated and convoluted to measure well the progress made by the project toward its objective and outcomes. Progress reports are lengthy and not reader-friendly; they do not present a concise view on the progress made to “*eliminate obsolete pesticide stockpiles and addressing contaminated sites within a sound chemicals management strategy*”. It is recommended to review these indicators and their respective targets and come up with fewer indicators and targets to monitor the project.

Recommendation 8: It is recommended to increase the communication with Stakeholders using information accumulated by the project in order to develop a more unified vision on what the project should do.

Issue to Address

There is a need for more communication among Stakeholders; with the aim of developing a more unified vision on what the project should do among key stakeholders such as PMB members and members of the technical advisory committee. There are striking differences among Stakeholders on what the project should do such as the options to deal with Category 1 and 2 contaminated material. As the project acquired valuable technical information, there is a need to communicate this knowledge more regularly and broadly. Increasing the transparency of the process will help the project to proceed to the large clean-up phase, particularly with the key decisions to be made to launch this phase. It is recommended for the remaining period of implementation, that the project implementation team coordinate an electronic monthly or quarterly bulletin to be sent to all stakeholders and beneficiaries to give updates on the project but also knowledge on management of POPs in Armenia.

Recommendation 9: It is recommended to review and consolidate the risks of this project.

Issue to Address

The management of risks related to the implementation of this project needs to be reviewed. There is a list of 5 risks identified in the project document also there are 2 risks added in the inception period and documented in the inception report. This latter list is somewhat more appropriate to the management of risks related to the implementation of the project, though some of them partially overlap. It includes the non-availability of co-financing; difficulties to export Category 1 material; issue to identify a hazardous waste temporary storage site; difficulties to treat Category 2 material; and the risk of release to the environment and human exposure, including difficulties to contain the site after excavation. It is recommended to review the list of risks – including the good analysis to mitigate these risks - and consolidate an updated list of risks with their mitigation measures and be monitored in the UNDP Atlas system.

1.4. MTR Ratings and Achievement Summary Table

Below is the rating table as requested in the TORs. It includes the required performance criteria rated as per the rating scales presented in Annex 9 of this report. Supportive information is also provided throughout this report in the respective sections.

Table 2: MTR Ratings and Achievement Summary Table

Measure	MTR Rating	Achievement Description
Project Strategy	N/A	
Progress Towards Results		
Objective Achievement:	MU	The objective is expected to achieve its end-of-project targets with major shortcomings.
Outcome 1.1 Achievement:	MU	The outcome is expected to achieve its end-of-project targets with major shortcomings.
Outcome 1.2 Achievement:	MU	The outcome is expected to achieve its end-of-project targets with major shortcomings.
Outcome 1.3 Achievement:	MU	The outcome is expected to achieve its end-of-project targets with major shortcomings.
Outcome 2.1 Achievement:	MU	The outcome is expected to achieve its end-of-project targets with major shortcomings.
Outcome 2.2 Achievement:	MU	The outcome is expected to achieve its end-of-project targets with major shortcomings.
Outcome 3.1 Achievement:	S	The outcome is expected to achieve most of its end-of-project targets, with only minor shortcomings.
Outcome 3.2 Achievement:	MS	The outcome is expected to achieve most of its end-of-project targets but with significant shortcomings.
Outcome 3.3 Achievement:	MS	The outcome is expected to achieve most of its end-of-project targets but with significant shortcomings.
Outcome 4.1 Achievement:	S	The outcome is expected to achieve most of its end-of-project targets, with only minor shortcomings.
Project Implementation & Adaptive Management	MS	Implementation of some of the 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, with some components requiring remedial action.
Sustainability³	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

Note: The ratings given above under “Progress Towards Results” are based on findings from this MTR measured against the current timeline that is the project will end in May 2019; i.e. the ratings do not consider the likelihood of a time extension.

³ Due to the nature of this project, the rating for sustainability, as defined in the UNDP-GEF guidance, is not fully adequate. In this case, the risks are not really about the sustainability of project achievements. It is rather risks to obtain the necessary financing (including co-financing) to implement activities under component 2 and risks of release in the environment with possibly human exposure. Overall, if the project is completed successfully, Category 1 material will have been disposed of, Category 2 will be treated and contained and the remaining waste at the Nubarashen burial site properly contained; hence no further risks of contamination.

2. CONTEXT AND OVERVIEW OF THE PROJECT⁴

1. Armenia is a small landlocked country located in the Caucasus region of South-Eastern Europe, bordering Georgia in the North, Azerbaijan in the North-East, East, and South-West, Iran in the South and Turkey in the West. The total area of the country is 29,740 km²; 46.8% is agricultural lands and 5.6% is surface waters, including the lake Sevan, a natural reservoir of drinking water for the entire region. Armenia is characterized by a mountainous continental climate, remarkable for its dryness. As to January 1, 2003, the population of Armenia was 3,210,300 persons, of which 64% are urban habitants. Armenia gained independence in 1991. The territorial and administrative division of the country consists of 11 marzes or regions (including the capital city of Yerevan that has a status of a marz with 12 districts/ circuit communities), 47 urban and 871 village communities.

2. Similar to other states of the Former Soviet Union, it still suffers from the environmental legacies accumulated during the Soviet time. Armenia with its highly developed agricultural sector (19% of GDP) had among the highest application rates of pesticides, particularly organochlorine pesticides in the Soviet Union. As a consequence the potential for human and environmental impacts associated with this use are widespread. Similarly, retained stockpiles of obsolete pesticides and associated contaminated sites are a leading manifestation of historical environmental legacies and source of continuing possible health risk and environmental degradation.

3. Two main legacies/issues are the object of this project: the Nubarashen burial site and the community based obsolete pesticide storehouses and stockpiles:

- i. ***Nubarashen Burial Site:*** It is located on the South-East edge of Yerevan in the Nubarashen district beside the Erebuni State Reserve protecting an agro-biodiversity area. It occupies about 0.8ha of fenced area enclosed on three sides by concrete runoff drains and two run off trenches located 10m on the down slope side. It is estimated that the site contains about 674m³ of pure pesticide⁵, which contaminated thousands m³ of soil at various level of contamination throughout the site. In 2004, the Nubarashen site was recognized as presenting a major potential environmental risk due to its location on an unstable slope and drainage course which resulted in sliding of the burial structure down slope, water in-flow, and release of buried material due to vandalism and illegal excavation. As a result, the government designated officially the situation as a priority issue, and mandated and funded the Ministry of Emergency Situations (MES) to take action.
- ii. ***Community-based Obsolete Pesticide Storehouses and Stockpiles:*** From a legacy point of view, Armenia had an estimated 600 storehouses (located in almost all villages/communities) for pesticides in 1990, including 13 regional storage facilities, which since independence have been consolidated and mostly operated by agro-business enterprises, while some storehouses were simply abandoned. A study conducted in parallel to the PPG phase for this project, identified 78 sites of which 24 were found to contain obsolete pesticides residuals. This study estimated a total quantity of around 150T of POPs containing obsolete pesticides waste.

4. Since the late 90's, Armenia signed/accessed all international conventions related to the management of chemicals/pollutants including the Stockholm, Basel, Rotterdam, Minamata and Vienna conventions, as well as protocols such as the Montreal Protocol. It also developed its national legal and regulatory frameworks to govern and manage chemicals and hazardous wastes, including the transport of dangerous goods and hazardous waste as well as the hygienic and sanitary requirements for soil quality and storage and transport of hazardous chemical waste.

5. In addition to develop an enabling environment, the long-term solution to address the 2 main repositories of obsolete pesticides accumulation presented above is to ensure the capture, secure prevention of any potential release, and eliminate the POPs pesticides stockpiles and wastes. However, important barriers exist in Armenia to eliminate POPs pesticides and obsolete pesticides as well as addressing hazardous waste and chemicals management issues. They include:

- Institutional barriers: inadequate role of local authorities, overriding licensing and environmental approval, processing imperatives, etc.

⁴ Information in this section has been mostly summarized from the project document.

⁵ Based on Dekonta's (GEOTest) survey, 2017

- Legal and regulatory barriers: overlaps, conflicts and gaps
- Low level of Information and awareness related to POPs pesticides and obsolete pesticide issues.
- Deficits in technical capacity and supporting infrastructure
- Lack of effective financial resources

6. This project has been developed to address these existing barriers. Its objective is "*to protect health and environment through elimination of obsolete pesticide stockpiles and addressing contaminated sites within a sound chemicals management strategy*". It will be achieved through the delivery of four components (*see more detailed about the project strategy in Annex 1*):

1. Capture and containment of obsolete pesticide stockpiles and wastes
2. Obsolete pesticide stockpile and waste elimination
3. Institutional and regulatory capacity strengthening for sound chemicals management and contaminated sites
4. Monitoring, learning, adaptive feedback, outreach, and evaluation

7. This is a project supported by UNDP, GEF, and the Government of Armenia. It is funded by a grant from the GEF of USD 4,700,000, a cash contribution from UNDP of USD 200,000, a grant from the Czech Trust Fund of USD 60,000 and an in-kind and cash contribution of USD 19,024,384 from the Government of Armenia, the private sector and OSCE. The project started on May 26, 2015 and its duration is 4 years. It is implemented under the "*Support to National Implementation Modality (NIM)*". The implementing partners are the Ministry of Nature Protection (MNP) and the Ministry of Emergency Situation (MES).

3. REVIEW FRAMEWORK

8. This mid-term review - a requirement of UNDP and GEF procedures - has been initiated by UNDP Armenia the Commissioning Unit and the GEF Implementing Agency for this project. This review provides an in-depth assessment of project achievements and progress towards its objectives and outcomes.

3.1. Objectives

9. The objective of the MTR was to assess progress towards the achievement of the project objectives and outcomes as specified in the Project Document and Project Inception Report, and assess early signs of project success or failure with the goal of identifying possible changes to be made in order to keep/set the project on-track to achieve its intended results. The MTR also reviewed the project's strategy and its risks to sustainability.

3.2. Scope

10. As indicated in the TORs for this MTR (*see Annex 2*), the scope of this review covered four parts of project progress, in accordance with the “*Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects*”. A summary of the scope of this MTR is presented below:

Part I: Project Strategy

Project Design

- Review the problem addressed by the project and the underlying assumptions;
- Review the relevance of the project strategy and assess whether it provides the most effective route towards expected/intended results;
- Review how the project addresses country priorities.
- Review country ownership;
- Review decision-making processes;
- Review the extent to which relevant gender issues were raised in the project design;

Results Framework/Log-frame:

- Undertake a critical analysis of the project's log-frame indicators and targets;
- Review the project's objectives and outcomes or components and how feasible they can be reached within the project's time frame;
- Examine if progress so far has led to, or could in the future catalyze beneficial development effects that should be included in the project results framework and monitored on an annual basis;
- Ensure broader development and gender aspects of the project are being monitored effectively.

Part 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 presented in the TORs and following the *Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects*;
- Compare and analyze the GEF Tracking Tool at the Baseline with the one completed before the MTR;
- Identify remaining barriers to achieving the project objective in the remainder of the project;
- By reviewing the aspects of the project that have already been successful, identify ways in which the project can further expand these benefits.

Part III: Project Implementation and Adaptive Management

Management Arrangements:

- Review overall effectiveness of project management as outlined in the Project Document;
- 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;
- Review how Results-Based Management is being implemented;
- Examine the use of the project's results framework/ log-frame as a management tool.

Finance and co-finance:

- Consider the financial management of the project, including cost-effectiveness;
- 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 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;
- Examine the financial management of the project monitoring and evaluation budget.
- Review all the project pilots and evaluate the proposals made under each pilot projects.

Stakeholder Engagement:

- Review project partnerships with direct and tangential stakeholders;
- Review stakeholder participation and country-driven project implementation processes;
- Review public awareness.

Reporting:

- Assess the concepts and strategies of the pilot plots being implemented in six targeted regions;
- Assess how adaptive management changes have been reported by the project management and shared with the Project Board.
- Assess the project progress reporting function and how well it fulfils GEF reporting requirements;
- 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;
- Review external project communication;

Part 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;
- Assess risks to sustainability in term of financial risks, socio-economic risks, institutional framework and governance risks, and environmental risks.

3.3. Methodology

11. The methodology that was used to conduct this mid-term review complies with international criteria and professional norms and standards; including the norms and standards adopted by the UN Evaluation Group (UNEG).

3.3.1. Overall Approach

12. The review was conducted in accordance with the guidance, rules and procedures established by UNDP and GEF as reflected in the UNDP “*Guidance for Conducting Mid-Term Reviews of UNDP-supported, GEF-*

*Financed Projects*⁶, and the UNEG Standards and Norms for Evaluation in the UN System. The review was undertaken in-line with GEF principles which are: *independence, impartiality, transparency, disclosure, ethical, partnership, competencies/capacities, credibility and utility*. The process promoted accountability for the achievement of project objectives and promoted learning, feedback and knowledge sharing on results and lessons learned among the project's partners and beyond.

13. The review adopted a *Utilization Focused Evaluation*⁷ approach, which is predicated on maximizing the practical value of the review to project stakeholders. The review was planned and conducted in ways that enhanced the likely utilization of both the findings and of the process itself to inform decisions and improve performance of the project. Using this approach, the Evaluator did not make decisions independently of the intended users, but he rather facilitated decision making amongst the people who will use the findings of the review.

14. The Evaluator developed review tools in accordance with UNDP and GEF policies and guidelines to ensure an effective project review. The review was conducted and findings were structured around the GEF five major evaluation criteria; which are also the five internationally accepted evaluation criteria set out by the Development Assistance Committee (DAC) of the Organization for Economic Co-operation and Development (OECD). There are:

- *Relevance* relates to an overall assessment of whether the project is in keeping with donors and partner policies, with national and local needs and priorities as well as with its design.
- *Effectiveness* is a measure of the extent to which formally agreed expected project results (outcomes) have been achieved, or can be expected to be achieved.
- *Efficiency* is a measure of the productivity of the project intervention process, i.e. to what degree the outcomes achieved derive from efficient use of financial, human and material resources. In principle, it means comparing outcomes and outputs against inputs.
- *Impacts* are the long-term results of the project and include both positive and negative consequences, whether these are foreseen and expected, or not.
- *Sustainability* is an indication of whether the outcomes (end of project results) and the positive impacts (long term results) are likely to continue after the project ends.

15. In addition to the UNDP and GEF guidance for reviewing projects, the Evaluator applied to this mandate his knowledge of review methodologies and approaches and his expertise in environmental management and issues. He also applied several methodological principles such as (i) *Validity of information*: multiple measures and sources were sought out to ensure that the results are accurate and valid; (ii) *Integrity*: Any issue with respect to conflict of interest, lack of professional conduct or misrepresentation were immediately referred to the client if needed; and (iii) *Respect and anonymity*: All participants had the right to provide information in confidence.

16. The evaluation was conducted following a set of steps presented in the table below:

Table 3: Steps Used to Conduct the Evaluation

I. Review Documents and Prepare Mission <ul style="list-style-type: none"> ▪ Start-up teleconference/finalize assignment work plan ▪ Collect and review project documents ▪ Draft and submit <u>Inception Report</u> ▪ Prepare mission: agenda and logistic 	III. Analyze Information <ul style="list-style-type: none"> ▪ In-depth analysis and interpretation of data collected ▪ Follow-up interviews (where necessary) ▪ Draft and submit <u>draft evaluation report</u>
II. Mission / Collect Information <ul style="list-style-type: none"> ▪ Fact-findings mission to Armenia for the Evaluator ▪ Interview key Stakeholders and conduct a field visit ▪ Further collect project related documents ▪ Mission debriefings / <u>Presentation of key findings</u> 	IV. Finalize Review Report <ul style="list-style-type: none"> ▪ Circulate draft report to UNDP-GEF and relevant stakeholders ▪ Integrate comments and submit <u>final Review Report</u>

17. Finally, the Evaluator signed and applied the “*Code of Conduct*” for Review Consultants (see Annex 3).

6 UNDP Evaluation Office, 2012, *Project-Level Evaluation – Guidance for Conducting Mid-Term Review of UNDP-Supported, GEF-Financed Projects*.

7 http://www.betterevaluation.org/en/plan/approach/utilization_focused_evaluation

The Evaluator conducted review activities, which were *independent, impartial and rigorous*. This MTR clearly contributed to learning and accountability and the Evaluator has personal and professional integrity and was guided by propriety in the conduct of his business.

3.3.2. Review Instruments

18. The review provides evidence-based information that is credible, reliable and useful. Information was mined from project documents, as secondary information, and primary information was obtained through data-gathering activities conducted for this review; most prominently key informant interviews and the visit of the Nubarashen burial site. Using several review tools and gathering information from different types of stakeholders at different levels of management, findings were triangulated through the concept of “*multiple lines of evidence*”, which validated the findings. To conduct this review the following review instruments were used:

Review Matrix: A review matrix was developed based on the review scope presented in the TOR, the project log-frame and the review of key project documents (*see Annex 4*). This matrix was structured along the five evaluation criteria and includes all review questions; including the scope presented in the guidance. The matrix provided overall directions for the review and was used as a basis for interviewing people and reviewing project documents.

Documentation Review: The Evaluator conducted a documentation review in Canada and in Armenia (*see Annex 5*). In addition to being a main source of information, documents were also used to prepare the fact-findings mission in Armenia. A list of documents was identified during the start-up phase and further searches were done through the web and contacts. The list of documents was completed during the fact-findings mission.

Interview Guide: Based on the review matrix, an interview guide was developed (*see Annex 6*) to solicit information from stakeholders. As part of the participatory approach, the Evaluator ensured that all parties viewed this tool as balanced, unbiased, and structured.

Mission Agenda: An agenda for the fact-findings mission of the Evaluator in Armenia was developed during the preparatory phase (*see Annex 7*). The list of Stakeholders to be interviewed was reviewed, ensuring it represents all project Stakeholders. Then, interviews were planned in advance of the mission with the objective to have a well-organized and planned mission to ensure a broad scan of Stakeholders’ views during the limited time allocated to the fact-findings mission.

Key Informant Interviews: Stakeholders were interviewed (*see Annex 8*). The semi-structured interviews were conducted using the interview guide adapted for each interview. All interviews were conducted in person with some follow up using emails when needed. Confidentiality was guaranteed to the interviewees and the findings were incorporated in the final report.

Field Visit: As per the TORs, a visit to the Nubarashen burial site was conducted during the mission of the Evaluator in Armenia. It ensured that the Evaluator had direct primary sources of information from the field. It gave opportunities to the Evaluator to observe the conditions of the site.

Achievement Rating: The Evaluator rated achievements according to the guidance provided in the TORs. It included a six-point rating scale to measure progress towards results, project implementation and adaptive management and a four-point rating scale for sustainability (*see Annex 9*).

3.4. Limitations and Constraints

19. The approach for this mid-term review is based on a planned level of effort of 22 days. It comprised a one-week mission to Armenia to interview key stakeholders, collect evaluative evidence; including a visit to the Nubarashen burial site.

20. The visit of the site and the interviews provided a good overview about the progress made so far and the way forward. Based on the information collected during the mission, the Independent Evaluator was able to

conduct a detailed assessment of actual results against expected results and successfully ascertains whether the project will meet its main objective - as laid down in the project document - and whether the project initiatives are, or are likely to be, sustainable after completion of the project. The Evaluator also made recommendations for any necessary corrections and adjustments to the overall project work plan and timetable and also for reinforcing the long-term sustainability of project achievements.

4. EVALUATION FINDINGS

21. This section presents the findings of this MTR adhering to the basic structure proposed in the TOR and as reflected in the UNDP project review guidance.

4.1. Project Strategy

22. This section discusses the assessment of the project strategy – including its relevance - and its overall design in the context of Armenia.

4.1.1. Project Design

23. As presented in Section 2 above, Armenia - a small land locked country located in the Caucasus region of South-Eastern Europe – had a highly developed agricultural sector under the Soviet Union, including high application of pesticides, particularly organochlorine pesticides. In the late 1970s and early 1980s, a program across the Soviet Union was initiated to collect the accumulated banned and expired pesticides that had accumulated within the pesticide distribution system for consolidation and disposal. The disposal option of choice was the development of engineered landfills or burial sites within each of the Soviet Republics, which resulted in the creation of the Nubarashen burial site in Armenia. Since that time, the country has stockpiles of obsolete pesticides, which with the associated contaminated sites are a potential source of continuing possible health risk and environmental degradation.

24. In this area of Persistent Organic Pollutants (POPs), Armenia has two main issues: the Nubarashen burial site and the obsolete pesticide storehouses/stockpiles:

- **Nubarashen Burial Site:** Located on the South-West edge of Yerevan, the site occupies about 0.8ha of fenced area enclosed on three sides by concrete runoff drains and two run off trenches located 10m on the down slope side. According to a recent assessment supported by the project, it is estimated that the site contains about 674m³ of pure pesticide, which contaminated over 24,000m³ of soil at various level of contamination throughout the site.
- **Obsolete Pesticide Storehouses/Stockpiles:** A study conducted in parallel to the PPG phase for this project, identified 24 sites containing obsolete pesticides residuals with an estimated total quantity of around 150T of obsolete pesticides waste.

25. Since its independence in 1961, Armenia equipped itself with the necessary policy and legislative instruments to increase its capacity to better manage its chemicals/pollutants. Armenia signed/accessed all international conventions related to the management of chemicals/pollutants including the Stockholm, Basel, Rotterdam, Minamata and Vienna conventions, as well as protocols such as the Montreal Protocol. It also developed its national legal and regulatory frameworks to govern and manage chemicals and hazardous wastes, including the transport of dangerous goods and hazardous waste as well as the hygienic and sanitary requirements for soil quality and storage and transport of hazardous chemical waste. However, the long-term solution to ensure the capture, secure prevention of any potential release, and eliminate the POPs pesticides stockpiles and wastes had also been facing important barriers. They include:

- Institutional barriers: absent role of local authorities, overriding licensing and environmental approval, processing imperatives, etc.
- Legal and regulatory barriers: overlaps, conflicts and gaps
- Low level of Information and awareness related to POPs pesticides and obsolete pesticide issues.
- Deficits in technical capacity and supporting infrastructure
- Lack of effective financial resources

26. In 2011, the Government of Armenia requested UNDP to develop this full scale project to specifically address the Nubarashen site along with other obsolete pesticide issues, and to improve the overall technical capacity for chemicals management. This project was to address these existing barriers but also contribute to the elimination of POPs pesticides stockpiles and wastes. The objective of the project is **"to protect health and environment through elimination of obsolete pesticide stockpiles and addressing contaminated sites within a sound chemicals management strategy"**. Its design had been anticipated that this objective would be achieved through the delivery of four components:

- Capture and Containment of Obsolete Pesticide Stockpiles and Wastes
- Obsolete Pesticide Stockpile and Waste Elimination
- Institutional and Regulatory Capacity Strengthening for Sound Chemicals Management and Contaminated Sites
- Monitoring, learning, adaptive feedback, outreach, and evaluation

27. In order to justify the project, an extensive preparation phase took place from 2011 and until the approval of the project in 2015. The key element of this preparation phase is summarized/documentated in the project document. It includes a situation analysis with an extensive review of the national legislative framework on waste and chemical management in Armenia. This section presents a good overview of the situation of POPs and the management of chemicals in Armenia, including a historical perspective on the accumulation of POPs and a good description of the Nubarashen site and of the obsolete pesticides storehouses/stockpiles in Armenia. It also included a good review of the laboratory capacity on obsolete pesticides in Armenia.

28. In addition to this review, the preparatory phase also included a good stakeholder analysis. The role and functions of stakeholders was reviewed with the identification of “who is responsible for what” and the interests and potential roles for the external non-government stakeholders. The analysis concluded that, at the time, there remains a significant awareness deficiency related to the POPs issues and their context. The review underlined the importance of having an ongoing, functioning, expanded Inter-Agency Committee on the Implementation of the SC to oversee the project and to serve as a vehicle for facilitating institutional stakeholder engagement and coordination, achieving collective decision making on key issues, as well as resolving the several potentially critical issues related to the regulatory jurisdiction and authority that could be counterproductive to the implementation of the project (*see also discussion in Section 4.3.2*). It also identified the need to strike an appropriate balance between creating awareness of risks and critical advocacy of solutions such that an overreaction to perceived risk does not itself become a barrier to the solutions practically available.

29. However, the justification of the project presented in the project document to address the 2 main issues described above from a national priority point of view was not as straightforward. The project document does not really include an assessment of the policy framework. It refers to a 2004 government decision that officially designated the situation as a priority issue and mandated and funded the Ministry of Emergency Situations (MES) to take action; however, no reference was given to this decision. The review of the legislative agenda of the government of Armenia since its independence indicates the development of a good enabling environment for the management of chemicals, well aligned with the obligations of the Stockholm convention (SC). However, besides setting up the categorization of hazardous chemicals and the rules to register, handle, recycle, treat, store, transport, and dispose of, there is no specific legislation – nor policies - setting up a national agenda for implementing the long-term solution that is to ensure the capture, secure prevention of any potential release, and eliminate the POPs pesticides stockpiles and wastes. Furthermore, as stated in the National Implementation Plan (NIP-2005), there is “*insufficient coordination and communication between various ministries, agencies, and other institutions (ecological and sectoral) on POPs issues, as well as limited abilities to include ecological problems in National and sectoral Plans for Development*”.

30. However, the NIP-2005, which provides an extensive review on the situation of chemicals in Armenia, mentioned the burial site with an estimate of about 500t of buried obsolete pesticides and a government decision (2004) to allocate a budget line from the reserve fund of the government to implement measures to ensure the safety of this burial site. It included the need to study the landslide risks and the integrity of the burial site, to fence the site and to study the contamination of soils and ground waters adjacent to the site. This plan also noted the need to develop a solution to remediate the polluted areas, including the final disposal of obsolete pesticides. Nevertheless, the NIP-2005 remained somewhat general without a strong focus on the need to address the Nubarashen burial site. A total of 23 areas with almost 50 different activities are listed as required to implement the priority goals of the NIP, and only 1 activity - *Facilitating liquidation /elimination of burial site of obsolete pesticides in an environmentally sound manner* – is focusing on a plan to liquidate the obsolete pesticides stockpiles and the burial site with an estimated cost of USD 120,000. Finally, the three national reports submitted to the SC Secretariat, none of them made a reference to the Nubarashen site nor to this project.

31. Nevertheless, the review conducted for this MTR reveals that despite the two issues to be addressed by

the project were not particularly high on the national priority agenda during the design phase of the project (2011-2015), this is changing. The review of the “*Program of the Government of the Republic of Armenia – 2017-2022*” indicates that under the chapter 4 Social, Section 4.4 Nature Protection, it will “*during 2019-2022, destroy overdue waste in Nubarashen landfill for pesticides and neutralize persistent organic pollutants in line with international commitments.*” Additionally, the “*Armenia Development Strategy – 2014-2025*”, under the chapter IX. Environmental Protection – Atmospheric Protection, mentioned the Nubarashen project (this project) as “*example of private-public partnership for reducing the impact of hazardous waste*”.

32. Furthermore, the Government Decree #49 (December 8, 2016) stipulates as one measure the “*Elimination of Nubarashen obsolete pesticides burial site*” during the period 2017-2020. The updated version of the NIP (approved by the government in December 2016), includes an action focusing on the “*environmentally sound liquidation of obsolete pesticides burial*” as well as the “*destruction of obsolete pesticides present at other sites (former warehouses and shops) and prevention of their future accumulation*”, both to be implemented during the period 2016-2018. Finally, according to a meeting with representatives from MES the Evaluator understands that a Concept paper on the protection and safety against chemicals and radiation was approved in 2017 and contain a reference to the risks of the Nubarashen site.

33. In the meantime, a meeting with a representative from the Ministry of Finance and a review of the Medium-Term Expenditures Framework (MTEF), indicates that no budget line to address these issues exists in the MTEF 2018-2020, including no co-financing for financing the containment and disposing of obsolete pesticides (*see more in Section 4.3.4*).

34. In conclusion, the review indicates that addressing the risks of the Nubarashen burial site is recently becoming a higher priority. It is now clearly stated in several national programmes and strategies and despite that no budget line is yet allocated, the strategic case is such that it is expected that the government may finally allocate some funds from the national budget in the near future. However, when considering that the MTEF has a three-year cycle and that Armenia is under severe fiscal restraints, it will require strong lobbying to get there.

UNDP Strategy in Armenia

35. Within the context of the cooperation agreement signed on March 8, 1995 between the government of Armenia and United Nations Development Programme, a United Nations Development Assistance Framework (UNDAF) 2016-2020 was agreed between the government of Armenia and the United Nations (UN) on July 31, 2015. It is a strategic programme framework that is guiding the cooperation between the government of Armenia and the UN for the corresponding period. The framework underlines Armenia’s vision and commitment to improve the living standards of the peoples of Armenia, while taking into account the realities and opportunities of its standing as a lower middle income country. It will rely on creative and innovative approaches and reach out to non-traditional development partners and donors.

36. Seven key results (called outcomes) were identified in this UNDAF 2016-2020 focusing on advancing equitable economic growth, improving environmental management, strengthening accountability, and delivering quality social services. These key results are aligned with the priorities established in the Armenia Prospective Development Strategy 2014-2025 and the Sustainable Development Goals. The UNDAF also embeds the five UN programming principles: a human-rights-based approach, gender equality, environmental sustainability, results-based management and capacity development. These seven key results are distributed under four pillars. Pillar #4 is about “*Environmental sustainability and resilience-building*”. Under this pillar, one outcome was identified: “*By 2020 Sustainable development principles and good practices for environmental sustainability resilience building, climate change adaptation and mitigation, and green economy are introduced and applied*”. Under this pillar the UNDAF mentioned the existence of “*approximately 8,000 tons of obsolete POPs waste and contaminated soil stored across the country and that is creates significant risk to human health and the environment*”. Out of a total resource requirement of over USD 119M, USD 28M (24%) were allocated to the pillar #4.

37. Based on this UNDAF 2016-2020, UNDP and the government of Armenia formulated the Country Programme Action Plan (CPAP) for the same period 2016-2020. This action plan contributes to three pillars and four outcomes identified in the UNDAF 2016-2020, including the fourth pillar on the environment and its related expected outcome. It is aligned with the Strategic Programme of Prospective Development 2014-2025,

particularly its sections 9 - Nature Protection and 11.4 – Energy, which together is to balance the protection of the environment while conducting a resource-efficient economy. The objective of the CPAP 2016-2020 is to contribute to the sustainable development and an equitable society in Armenia. Its vision for development includes: a diversified rural economy; strong innovation and small and medium enterprises sector; an economy founded on ‘green’ or sustainable principles, including energy efficiency, renewables, and the sustainable use of natural resources; disaster preparedness and risk reduction; open governance; and effective implementation of human rights and equal opportunities’ legislation.

38. Under the environment, the CPAP 2016-2020 includes five outputs with estimated resource requirements of USD 653k from UNDP and USD 16.5M from other resources. The five outputs are:

- a) Regulatory framework of social, environmental and economic sectors is updated to better address environmental sustainability and resilience principles
- b) Innovative climate change and disaster-risk reduction/resilience measures and practices applied and replicated across the country
- c) Government uses innovative mechanisms and tools for evaluation and decision-making over the conservation and sustainable use of natural resources
- d) Low carbon and ‘green economy’ issues become priority for the Government, supported by relevant regulatory framework and activities
- e) New production and consumption patterns are introduced; new ‘green’ jobs are created

39. Under the third output above, one target is “95% of known obsolete pesticides, namely persistent organic pollutants, disposed of in an environmentally sound manner (measured in tons)”. This project would contribute to the achievement of this target. The project is based on the approach of ensuring the capture, securing to prevent continuing release, and the elimination of the substantive POPs pesticides stockpiles; and, consequently, increasing the level of protection of human health and the environment. In addition, the project has also been strengthening the national institutions capacity to manage hazardous waste and contaminated sites as part of developing the overall capability of managing chemicals in Armenia.

GEF Focal Area Strategy

40. The project was developed (and is funded) under the GEF-5 cycle. The goal of the chemicals strategy under GEF-5 was “to promote the sound management of chemicals throughout their life-cycle in ways that lead to the minimization of significant adverse effects on human health and the global environment”. With a total envelope of USD 420M for chemicals, USD 375M (89%) were allocated to POPs. The chemicals strategy was made up of three key objectives:

- Phase out POPs and reduce POPs releases;
- Phase out ODS and reduce ODS releases; and
- Pilot sound chemicals management and mercury reduction.

41. Under the first objective, the strategy identified 5 outcomes: (i) Production and use of controlled POPs chemicals phased out; (ii) Exempted POPs chemicals used in an environmentally sound manner; (iii) POPs releases to the environment reduced; (iv) POPs waste prevented, managed, and disposed of, and POPs contaminated sites managed in an environmentally sound manner; and (v) Country capacity built to effectively phase out and reduce releases of POPs.

42. Under the current GEF-6 cycle, the GEF chemicals and waste focal area strategy continues to play a catalytic role in leveraging budgetary resources from national governments and incentivizing the private sector to contribute more to the achievement of elimination and reduction of harmful chemicals and waste. The Long-term goal is “to prevent the exposure of humans and the environment to harmful chemicals and waste of global importance, including POPs, mercury and ozone depleting substances, through a significant reduction in the production, use, consumption and emissions/releases of those chemicals and waste”. The strategy includes two strategic objectives and 6 programmes, including the second objective “to reduce the prevalence of harmful chemicals and waste and support the implementation of clean alternative technologies/substances” and the third programme “Reduction and elimination of POPs”. A total envelope of USD 554M for chemicals was identified for this GEF-6 chemicals strategy, including USD 307M (55%) allocated to programme 3.

43. The review of the project indicates that it is fully consistent with the GEF-5 – Chemicals strategy and

also with the GEF-6 Chemicals and Waste strategy. The main focus of the project is to dispose of POPs stockpiles in Armenia; hence reducing the risks of POPs release in the environment and protecting human health. It is well aligned with the first objective of the GEF-5 chemicals strategy and with the programme 3 of the GEF-6 chemicals and waste strategy.

Gender Considerations

44. Gender considerations are not mentioned in the project document. In *Annex F Social and Environmental Screening*, it is stated that the Principle 2: Gender Equality and Women's Empowerment is not applicable to this project, hence gender-specific indicators are not applicable neither. Moreover, under the question "how the Project is likely to improve gender equality and women's empowerment", it is stated that "*the national development benefits, equal for men and women, will be the elimination of a major national priority obsolete POPs pesticides related environmental problem, the development of national institutional and technical capability related to the management of hazardous waste and of contaminated sites and perhaps most significantly the use of the project to stimulate the development of a national hazardous waste management facility site. The elimination/safe disposal of POPs hazardous waste from the Project's subject site will work as an important positive externality for women's reproductive health. Moreover, women's civil society organizations, Environmental NGOs, and advocacy groups actively participated in the formulation/design of the Project*".

45. Nevertheless, although the *Principle 2: Gender Equality and Women's Empowerment* is not applicable to this project, the project team has been reporting on the progress in advancing gender equality and women's empowerment in the project progress reports. In the 2017 Project Implementation Review (PIR) it was reported that the Gender Marker score increased from GEN1 to GEN2. This increase was due mostly to the fact that women are more vulnerable to POPs impact, especially in terms of reproductive health⁸. It also reported that women have more actively participated and assumed leadership roles in public consultations meetings and other events supported by the project.

46. It was also mentioned that representatives of two women-led environmental NGOs "*Armenian Women for Health and a Healthy Environment (AHHE)*" and "*EcoLur*", are pro-active members of the Project Advisory Committee. They provide regular advisory support to the Project Management Board (PMB) and participate in the decision making process on relevant gender-sensitive social and environmental issues.

47. In conclusion, the POPs project is well aligned with the GEF-5 Chemicals focal area strategy. It is part of the CPAP 2016-2020 and should contribute to the CPAP target "*95% of known obsolete pesticides, namely persistent organic pollutants, disposed of in an environmentally sound manner (measured in tons)*". Although the project was requested by the government in 2011, it was not a direct response to a clear national priority at the time. Addressing both the Nubarashen burial site and the obsolete pesticides storehouses/ stockpiles issues were not high national priorities back in 2011. However, since that time and along with the implementation of this project, these issues are now on the national priority agenda, though no national budget line is yet allocated. It is part of the "*Program of the Government of the Republic of Armenia – 2017-2022*", and of the "*Armenia Development Strategy – 2014-2025*". It is also stipulated in the Government Decree #49 (December 8, 2016) as one measure to "*Eliminate the Nubarashen obsolete pesticides burial site*", in the updated version of the NIP (2017), and in a Concept paper on the protection and safety against chemicals and radiation, which was approved in 2017.

4.1.2. Results Framework / Log-frame

48. The Strategic Results Framework identified during the design phase of this project presents a coherent set of expected results but its documentation in the project document is somewhat cumbersome. No changes were made to the *Project Results Framework* during the inception phase. The review of the objective and outcomes indicates a satisfactory and logical "*chain of results*" – Activities→Outputs→Outcomes→Objective. Project resources have been used to implement planned activities to reach a set of expected outputs (34), which would contribute in achieving a set of expected outcomes (9), which together should contribute to achieve the overall objective of the project. This framework also includes - for each outcome - a extensive set of indicators

⁸ POPs can accumulate and can be passed from mother to child and result in growth and mental development problems.

and targets to be achieved at the end of the project and that are used to monitor the performance of the project. Monitoring a project with a total of 32 indicators and 48 targets goes without saying that it must be a difficult and time consuming task (*more on this in section 4.3.5*).

49. The aim of the project is ensuring the capture, securing to prevent continuing release, and eliminating the substantive POPs pesticides stockpiles identified in Armenia. It seeks to maximize the amount of actual POPs dealt with and the level of protection for human health and the environment calibrated to the availability of financial resources. In addition, the project also addresses the less substantive but nevertheless important public issue of non-POPs OPs by strengthening the national institutional, technical and physical capacities in the area of hazardous waste and contaminated site management. This is part of the government strategy to increase its capacity to better manage chemicals in Armenia, particularly POPs and obsolete pesticides. It was noted by the Evaluator that this project raised the profile of these issues and the need to address them; as a result, these issues are now higher on the national priority agenda.

50. The logic model of the project presented in the *Project Results Framework* is summarized in table 4 below. It includes one objective, four component, nine outcomes and 34 outputs. For each expected outcome, targets to be achieved at the end of the project were identified.

Table 4: Project Logic Model

Expected Results	Targets at End of Project
Project Objective: Protection of health and environment through elimination of obsolete pesticide stockpiles and addressing contaminated sites within a sound chemicals management strategy.	<ol style="list-style-type: none"> 1. Removal and export of Pure obsolete pesticides and highly contaminated POPs waste for environmentally sound destruction 2. 12,700 of POPs contaminated soil securely from the Nubarashen site and OP storage sites permanently contained and monitored at the restored and stabilized Nubarashen site. 3. 7,100 of treated Category 2 POPs waste contained at the Nubarashen site. 4. 1,050 t of pure obsolete pesticides and highly contaminated POPs waste exported and destroyed. 5. 7,100 t of POPs waste in the form of heavily contaminated soil treated/remediated 6. Fully updated regulatory framework for hazardous and chemicals waste management implemented 7. Environmental and health risk assessment methodologies documented, disseminated and implemented as part of the national regulatory assessment process for contaminated sites. 8. Professional in regulatory agencies, academia, NGOs and environmental service providers trained on their application
Component 1 - Capture and Containment of Obsolete Pesticide Stockpiles and Wastes.	
Outcome 1.1: Removal of priority POPs pesticide waste from the Nubarashen burial site, secure containment of residual contamination on-site, site stabilization and restoration, with the site secured under appropriate institutional arrangements providing effective access limitations, monitoring and future land use control, all endorsed by an informed public.	<ol style="list-style-type: none"> 9. Implementation of design, operational procedures and conformance with approval conditions verified 10. Removal to secure storage of 7,000 t of POPs pesticide waste in the form of highly contaminated soil (Category 2) from the Nubarashen burial site. 11. Onsite secure permanent containment of 12,000 t of low and moderately contaminated soil in an engineered landfill within the Nubarashen site in place 12. Site fully restored with sustainable phytoremediation vegetation, appropriately fenced and gated with signage including a 100m buffer zone around the former burial site. 13. The site drainage system upgraded and functional inclusive of a monitored phytoremediation reed bed downstream pond. 14. Permanent measures to maintain land stability upstream and downstream of site including removal of perched water table and upstream ponds. 15. Long term monitoring program in place and funded by national budgets.

Expected Results	Targets at End of Project
	16. Institutional arrangements respecting long term land use of the site and surrounding territory involving its administration as part of the adjoining ecological reserve. 17. Sustainable operational capability in the public and private sector for hazardous chemical waste management and contaminated site clean-up in place 18. 2 additional public consultation events held and 5 public documents/web/media products produced. 19. Survey indicating the views of affected public stakeholders upon completion
Outcome 1.2: Development of the Kotayk national hazardous waste management site at equipped with secure storage and basic infrastructure to allow introduction of HW treatment soil remediation technologies constructed and operated for the secure storage of POPs pesticide waste and OP stockpiles, and the treatment of POPs pesticide contaminated soil.	20. Implementation of design, operational procedures and conformance with approval conditions verified 21. Kotayk national HW management site utilized for general HW management activities on a sustainable basis. 22. Secure receiving and storage of any contingency volumes of Category 1 pesticide waste and OP stockpiles from Nubarashen and OP stockpile site remediation operations. 23. Handling and export shipment of any contingency volumes of Category 1 pesticide waste and OP stockpiles from Nubarashen and OP stockpile site remediation operations for environmentally sound destruction. 24. Secure receiving and secure storage of approximately 100 t amount of additional soil highly contaminated with POPs pesticide) from OP storehouse cleanup activities. 25. Treatment and remediation of at least 7,100 t of Category 2 material from Nubarashen and OP storage site clean-ups or alternatively export of this material to suitable treatment and remediation facilities elsewhere. 26. Sustainable operational capability for hazardous chemical waste management facility in place 27. 2 public consultation events held and 5 public documents/web/media products delivered
Outcome 1.3: Remaining significant historical OP storehouses have OP stocks packaged and removed and residual site contamination cleaned up.	28. Under MoA supervision all former OP stores are maintained in other productive uses. 29. Detailed contaminated site and risk assessments and remediation/clean up designs on identified on up to 6 priority sites completed/documented 30. Excavation/removal, remediation and/or containment of 200 t of contaminated soil from up to 6 identified priority sites completed 31. 6 public consultation events held at 6 priority sites
Component 2 – Obsolete Pesticide Stockpile and Waste Elimination.	
Outcome 2.1: Removal from Armenia of all substantially all high priority POPs pesticides, associate very high concentration wastes and OP stockpiles.	32. Shipment and environmental sound destruction of any contingency volumes of Category 1 pesticide waste and OP stockpiles from Nubarashen and OP stockpile site remediation operations at qualified competitive export destruction facility.
Outcome 2.2: Environmentally sound remediation of heavily POPs pesticide contaminated soil inclusive of destruction of extracted POPs pesticides demonstrated.	33. Shipment and environmental sound destruction of 7,100 t of Category 1 heavily contaminated POPs contaminated soil (POPs pesticide waste) remediated to levels below the low POPs content at the Kotayk site and returned/contained on the Nubarashen site, or exported to a qualified facility. 34. 20 national technical personal operationally qualified and experienced on a modern contaminated soil treatment/remediation technology. 35. Commercial service provider capability available for other contaminated soil treatment/remediation projects in Armenia.
Component 3 – Institutional and Regulatory Capacity Strengthening for Sound Chemicals Management and Contaminated Sites.	

Expected Results	Targets at End of Project
Outcome 3.1: Legal/regulatory and technical guidance tools for management of chemical wastes, including POPs, and, contaminated sites management within a national sound chemicals management framework strengthened.	36. (List of specific legislative and regulatory measures to be provided by MNP/UNDP CO) 37. Adopted guidance materials operational and EHS procedures for hazardous chemicals waste handling, transport, storage and disposal consistent with international practice implemented. 38. National training program delivered to at least 50 relevant technical personnel in regulatory and private sector service provider positions who would attain relevant certification. 39. Adopted guidance materials on environmental and health risk assessment methodologies and practices applicable to hazardous waste stockpiles and contaminated sites developed in accordance with international practice implemented. 40. Training of at least 50 professionals from regulatory authorities, academia, NGOs and environmental service providers
Outcome 3.2: Technical/Environmental performance evaluation and upgrading requirements for existing national destruction capacity.	41. Full test burn program completed and licensing decisions made on an expanded menu of hazardous waste made. 42. A technical assessment and upgrading investment plan is completed for purposes of improving facility efficiency and environmental performance including potential application to chlorinated waste streams.
Outcome 3.3: Basic national capacity for effective hazardous chemicals sampling and analysis for multi-environmental media and contaminated sites in place, operational and certified to international standards.	43. National strategy implemented as reflected by availability of effective support capability for sound chemicals management particular hazardous waste management and contaminated sites. 44. Three designated laboratories upgraded and operational. 45. Long term national budget commitments and/or business plans in place ensuring sustainable operation 46. 15 additional key laboratory personal from designated laboratories trained 47. 3 designated laboratories achieved full international certification
Component 4 – Monitoring, learning, adaptive feedback, outreach, and evaluation.	
Outcome 4.1: Monitoring, learning, adaptive feedback, outreach, and evaluation.	48. Final evaluation report ready in the end of project

Source: project document – Project Results Framework

51. Despite an overall cohesive strategy, the Evaluator noted that the project strategy as documented in the project document is somewhat cumbersome to follow. The project is segmented into 3 key components plus an M&E one. As per the project document, under each component, a set of outcomes were identified (9), which are composed of 34 outputs and then further divided into main activities (28) under the outputs. The result is a rather convoluted strategy to understand, implement, track, monitor and report on. After reviewing these list of expected results, which are for the most past low level results, a simpler solution could have been to identify one expected outcome for each component (3+1), then call the current outcomes as outputs (9), and collapse the current list of outputs (34) and activities (28) into one set of main activities to be implemented under each output. This approach would reflect better the relatively simple strategy of this project that is (i) to capture and contain obsolete pesticide stockpiles; (ii) to eliminate obsolete pesticide stockpile; and (iii) to develop the institutional and regulatory capacity for sound chemical management and contaminated sites management.

52. Nevertheless, this strategy or “logic model” was confirmed during the inception phase of the project, including at the inception workshop held in Yerevan on December 4, 2015. No changes were made to the Project Results Framework during the inception phase, including its extensive set of indicators and targets. The inception workshop enabled stakeholders to review the aim of the project, its management arrangements and to discuss its implementation, its mode of operation and the risks. Despite that the overall risk was rated as moderate, it was also reported in the inception report that “it is a high risk project since it involves investments into clean-up operations for hazardous chemicals. In this regard an important question is related to ascertaining the firm confirmation of timing and availability of co-funding which is an essential step before

initiating larger scale works”.

53. It was also noted by the Evaluator, that during the inception phase, critical issues, which could greatly impede the implementation of the project were raised and discussed extensively at the inception workshop. Three issues are particularly worth flagging for this MTR:

- *Feasibility of arranging export for the destruction of high concentration material:* As a land-locked country, Armenia needs to find a transit country to transport its hazardous wastes to their final destination to be disposed of. No easy routes were identified and the possibility of not finding any export solutions was raised as an issue.
- *Mobilization of USD 19.3M as co-financing:* This co-financing includes a mix of in-kind and cash co-financing and for the most part it was planned to come from the government budget. No process to include this cash needs in the national budget had taken place at the outset of the project. Moreover, when considering the budgetary process (the MTEF is a three-year cycle), it was said that the prospects of getting these kind of incremental money included in the state budget given other priorities in the absence of some top down policy directive was low.
- *Creation of a temporary hazardous waste storage site in Kotayk:* Kotayk was identified as a potential site for an interim storage place for Category 1 contaminated material before it will be exported and for on-site treating/remediating of Category 2 contaminated material. However, no firm government commitment was made at the outset of the project and, based on various interviews conducted by the Evaluator, the Kotayk site is not a temporary storage option anymore. A new site needs to be found.

54. The review of the project design conducted for this MTR also reveals that implementing this type of projects is different from implementing other typical biodiversity, land degradation and climate change adaptation projects funded by GEF. The nature of a POPs project such as this one aiming at eliminating hazardous contaminated material has a strong engineering component and its management needs to incorporate some management elements from the way civil engineering projects are managed. In addition to a log-frame, which identify the expected results and the related targets to monitor its progress, such a project should also incorporate concepts such as a *Work Breakdown Structure (WBS)*, which breaks down the scope of the project into visual, manageable chunks; use a *Gantt Chart* to schedule the implementation of the project and monitor its progress, allowing the visualization of the project timeline by transforming task names, dates, durations, and end dates into cascading horizontal bar charts; and identify the *Critical Path*⁹, a method to calculate the minimum project completion time and the start and end dates for all project tasks. It identifies the critical tasks that, if delayed, will delay the entire project. This method helps to reduce timelines, manage resources, and compare planned with actual progress.

55. Identifying the critical path of the project is a particularly important management tool at this point in time. Due to the occurrence of several implementation delays, the overall implementation of the project has been delayed without knowing exactly when the project can be totally completed. It would help the project implementation team to identify which tasks is critical and what can be done to mitigate any delays.

56. Overall, the implementation strategy of the project described in the project document was to first classify the contaminated material at the Nubarashen burial site into three categories: I-pure pesticides; II-heavily contaminated soil; and III-low level contaminated soil. Then the strategy was to export Category I hazardous waste for destruction; treat/remediate in-country Category II hazardous waste; and contain Category III hazardous waste at the source, i.e. at the Nubarashen site. Finally, the elimination of Category I and II necessitates an interim storage; to consolidate the Category I hazardous waste before its exportation to be disposed of and to treat/remediate Category II hazardous waste on site.

57. This strategy and the expected results of the project already show some of these critical tasks, which cannot be really compressed and which have an implicit order for their implementation. For instance, activities to be implemented under component 1 (16% of the GEF grant) need to be completed before most activities

9 There are many definitions of a critical path in management. One of them found in Google is “the longest sequence of activities in a project plan which must be completed on time for the project to complete on due date. An activity on the critical path cannot be started until its predecessor activity is complete; if it is delayed for a day, the entire project will be delayed for a day unless the activity following the delayed activity is completed a day earlier.”

under component 2 (72% of the GEF grant) can be implemented. There is a logical sequence of activities/tasks which, together dictate the total length of time needed to complete the project. Overall, activities to be implemented under component 1 and 2 (88% of the GEF grant) can be grouped in several key tasks: (i) hazardous wastes need to be excavated and sorted from the burial site; (ii) Category I and II material need to be temporarily stored in a secure temporary storage which needs to be ready to receive this material when the excavation will take place; (iii) once the site is clean of Category I and II, the Category III material needs to be contained securely on site; (iv) once the Category I material is securely packaged, it can be exported and be disposed of; (v) technology to treat Category II waste can then be acquired and installed at the temporary site; finally, (vi) Category II waste can be treated. As said earlier, it goes without saying that this is a high risk project investing in clean-up operations of hazardous chemicals.

58. In conclusion, the review of the project strategy and the national context for this project indicates that the issue of eliminating stockpiles of obsolete pesticides including those buried in the Nubarashen site is now becoming part of the national priority agenda; it is clearly mentioned in the “*Program of the Government of the Republic of Armenia – 2017-2022*”. However, no national budget line has been allocated to this activity yet; hence hampering the implementation of the project as planned at the outset with a combined GEF and government cash and in-kind contributions. The review of the implementation strategy reveals that this type of project has a strong engineering component and it would need to be managed more similarly to a civil engineering project with the use of WBS, Gantt chart and the identification of the critical path providing critical information on the timeline to implement the project and its minimum duration.

4.2. Progress Towards Results

59. This section discusses the assessment of project results; how effective the project is to deliver its expected results and what are the remaining barriers limiting the effectiveness of the project.

4.2.1. Progress Towards Outcomes Analysis

60. As presented in Sections 4.1, the project has been implemented through nine (9) outcomes. The implementation progress is measured through a set of 32 indicators and 48 targets. On the next page is a table listing key deliverables achieved so far by the project against each outcome and their corresponding targets.

61. Additionally, a color “*traffic light system*” code was used to represent the level of progress achieved so far by the project, as well as a justification for the given rating (color code). ***Note that the analysis and ratings presented in the table below have been conducted with the assumption that the project will terminate in May 2019 as per its current official ending date.***




	Target achieved
	On target to be achieved
	Not on target to be achieved

Table 5: List of Delivered Results

Expected Results	Project Targets	Results (Deliverables)	MTR Assess	Justification for rating
Project Objective: Protection of health and environment through elimination of obsolete pesticide stockpiles and addressing contaminated sites within a sound chemicals management strategy.	<ul style="list-style-type: none"> Removal and export of Pure obsolete pesticides and highly contaminated POPs waste for environmentally sound destruction 12,700 of POPs contaminated soil securely from the Nubarashen site and OP storage sites permanently contained and monitored at the restored and stabilized Nubarashen site. 7,100 of treated Category 2 POPs waste contained at the Nubarashen site. 	<ul style="list-style-type: none"> The assessment and clean-up design for the Nubarashen site is being completed. It includes a contamination survey, engineering-geological and hydrogeological surveys and a geophysical survey. It found an estimated total weight of hazardous material of 1,052t of Category 1, 4,123t of Category 2 and a total of 8,481t of Category 3. The assessment also concluded on the considerable contamination within the site and its surroundings as well as the risk of landslide / slope stability of the landfill. A risk assessment of the Nubarashen site also took place in 2017. As corrective actions to address this POPs legacy issue, it recommended 4 options: zero (status quo), first (minimalist - cost: USD 1.25M), second (active clean-up - cost: USD 3.05M), and third options (optimal solution - cost: USD 40 to 50M). Following consultations with the Hradzan community and local NGOs where the Kotayk site for hazardous waste would be located, the proposal was rejected. The municipality of Yerevan and the Ministry of Emergency Situations are exploring other options in the proximity of the Nubarashen site, including an abandoned chemical factory close to the capital city. Assessment and technical evaluation for the selection of destruction facilities/modality (abroad or in-country) for hazardous POPs/OPs waste disposal/incineration is underway to identify realistic options taking into account the recent refusal of the Hradzan community for constructing the Kotayk temporary storage site. In the meantime, the export of Category 1 POPs waste (pure pesticides) faces transit issues through tier countries such as Georgia and Iran. Currently, Georgia's legislation does not allow the transit of hazardous waste coming from another country. A legislation change is needed. Iran could be an option to transit the waste going to Europe to be disposed of or be treated in Isfahan where a POPs treatment facility exists. The selection of decontamination technologies is under discussion by Stakeholders, which involve pilot processing of certain tonnage of POPs contaminated soil and visit of technology sites in order to get acquainted with technology requirements and processing conditions to assess their applicability to the Nubarashen burial site. 		<ul style="list-style-type: none"> Considering that only about 12 months of implementation are left, it is doubtful that this target can be achieved within the current timeframe of the project.
	<ul style="list-style-type: none"> 1,050 t of pure obsolete pesticides and highly contaminated POPs waste exported and destroyed. 7,100 t of POPs waste in the form of heavily contaminated soil treated/remediated 			
	<ul style="list-style-type: none"> Fully updated regulatory framework for hazardous and 	<ul style="list-style-type: none"> The requirements for the establishment and operation of hazardous waste storage facilities stated in the national legislation were reviewed and 		<ul style="list-style-type: none"> More activities should take place in

Expected Results	Project Targets	Results (Deliverables)	MTR Assess	Justification for rating
	chemicals waste management implemented	analyzed, and gaps were identified. Additional specific norms based on international best practices were recommended and added in the TORs for the company selected to conduct an EIA for the construction of the temporary site.		the future and the target should be achieved.
	<ul style="list-style-type: none"> Environmental and health risk assessment methodologies documented, disseminated and implemented as part of the national regulatory assessment process for contaminated sites. Professional in regulatory agencies, academia, NGOs and environmental service providers trained on their application 	<ul style="list-style-type: none"> Capacity gaps for the management of hazardous waste were reviewed through a stakeholder consultation process and experts' assessments. Thematic training for technical and operational staff from the Ministry of Emergency Situations, Ministry of Nature Protection, Yerevan Municipality, Hrazdan city Municipality, private sector, academia and NGOs, was initiated. The training was conducted by an expert from the Czech Republic and the Czech experience with the management of hazardous wastes was much valued by participants. 		<ul style="list-style-type: none"> More activities should take place in the future and the target should be achieved.
Component 1 - Capture and Containment of Obsolete Pesticide Stockpiles and Wastes.				
Outcome 1.1: Removal of priority POPs pesticide waste from the Nubarashen burial site, secure containment of residual contamination on-site, site stabilization and restoration, with the site secured under appropriate institutional arrangements providing effective access limitations, monitoring and future land use control, all endorsed by an informed public.	<ul style="list-style-type: none"> Implementation of design, operational procedures and conformance with approval conditions verified 	<ul style="list-style-type: none"> A first tender to select an international environmental/engineering company for conducting a detailed site assessment and design of the Nubarashen burial site clean-up works, was carried out in 2016. The evaluation panel found three technically qualified proposals (out of 5). However, no final decision were made and the tender was cancelled. A revised tender was launched at the end of 2016 and four (4) international eligible proposals were received. The consortium DEKONTA a.s. / GEOTest a.s. from the Czech Republic won the tender: <ul style="list-style-type: none"> A site assessment work took place in 2017 including a contamination survey, engineering-geological and hydrogeological surveys and a geophysical survey. It found¹⁰ an estimated total weight of hazardous material of 1,052t of Category 1, 4,123t of Category 2 and a total of 8,481t of Category 3. The assessment also concluded on the considerable contamination within the site and its surroundings as well as the risk of landslide / slope stability of the landfill. A risk assessment also took place in 2017. As corrective actions, it recommended 4 options: zero (status quo), first (minimalist – cost: USD 		<ul style="list-style-type: none"> This target is well underway to be achieved and more activities will take place during the remaining period of implementation.

10 Dekonta, December 2017, *Comprehensive site mapping and analytical assessment report*.

Expected Results	Project Targets	Results (Deliverables)	MTR Assess	Justification for rating
		1.25M), second (active clean-up – cost: USD 3.05M), and third options (optimal solution – cost: USD 40 to 50M).		
	<ul style="list-style-type: none"> Removal to secure storage of 7,000 t of POPs pesticide waste in the form of highly contaminated soil (Category 2) from the Nubarashen burial site. 	<ul style="list-style-type: none"> Consultations with the Hradzan community and local NGOs where the Kotayk site for hazardous waste would be located took place, including attempts to address public concerns. However, the proposal to construct a temporary hazardous waste site in Kotayk was rejected by the local community. The municipality of Yerevan and the Ministry of Emergency Situations are exploring other options in the proximity of the Nubarashen site, including an abandoned chemical factory close to the capital city. As long as no secure storage site is has been found, no excavation work can take place at the Nubarashen site. 		<ul style="list-style-type: none"> Considering that only about 12 months of implementation are left, it is doubtful that this target can be achieved within the current timeframe of the project.
	<ul style="list-style-type: none"> Onsite secure permanent containment of 12,000 t of low and moderately contaminated soil in an engineered landfill within the Nubarashen site in place Site fully restored with sustainable phytoremediation vegetation, appropriately fenced and gated with signage including a 100m buffer zone around the former burial site. The site drainage system upgraded and functional inclusive of a monitored phytoremediation reed bed downstream pond. Permanent measures to maintain land stability upstream and downstream of site including removal of perched water table and upstream ponds. Long term monitoring program in place and funded by national budgets. 	<ul style="list-style-type: none"> Activities to meet these targets can only be implemented once the Nubarashen site can be excavated and that the most contaminated material can be securely transported and stored in a temporary site. The remaining hazardous waste (Category 3 low to moderately contaminated soil) will then be safely contained on-site at Nubarashen, including appropriate stabilization of the landfill. 		<ul style="list-style-type: none"> Considering that only about 12 months of implementation are left, it is doubtful that this target can be achieved within the current timeframe of the project.

Expected Results	Project Targets	Results (Deliverables)	MTR Assess	Justification for rating
	<ul style="list-style-type: none"> Institutional arrangements respecting long term land use of the site and surrounding territory involving its administration as part of the adjoining ecological reserve. 			
	<ul style="list-style-type: none"> Sustainable operational capability in the public and private sector for hazardous chemical waste management and contaminated site clean-up in place 	<ul style="list-style-type: none"> Activities to meet this target will only be conducted once the excavation and clean-up of the Nubarashen site will commence. 		<ul style="list-style-type: none"> Considering that only about 12 months of implementation are left, it is doubtful that this target can be achieved within the current timeframe of the project.
	<ul style="list-style-type: none"> 2 public consultation events held and 5 public documents/web/media products delivered Survey indicating the views of affected public stakeholders upon completion 	<ul style="list-style-type: none"> Following the reservations from impacted communities and environmental NGOs on the Kotayk site as a temporary hazardous waste storage site, two public consultation meetings were organized, including in both the presence of representatives from environmental NGOs (<i>see more details below</i>). 		<ul style="list-style-type: none"> More activities should take place in the future and the target should be achieved.
Outcome 1.2: Development of the Kotayk national hazardous waste management site at equipped with secure storage and basic infrastructure to allow introduction of HW treatment soil remediation technologies constructed and operated for the secure storage of POPs pesticide waste and OP stockpiles, and the treatment of POPs pesticide contaminated soil.	<ul style="list-style-type: none"> Implementation of design, operational procedures and conformance with approval conditions verified 	<ul style="list-style-type: none"> A first tender package for the development of a centralized national hazardous chemical waste storage and management facility was developed and announced on August 30, 2016. Due to public demand for changes in the TORs and the high cost of received financial proposals (exceeding the available budget) the tender was cancelled. The revised RFP and TORs were re-announced on December 20, 2016. A contract was signed in April 2017 with an Armenian company, “Electronnakhagits” CJSC, for the design/operational planning and approvals of construction works for the development of a national hazardous chemical waste storage/management facility. A complete EIA was conducted for the Kotayk site including a site investigation, the assessment of building and infrastructure needs and the drawings for the site. However, at a special Project Management Board (PMB) meeting on June 16, 2017, it was decided to temporarily suspend 		<ul style="list-style-type: none"> More activities should take place in the future once the final site will be selected and the target should be achieved.

Expected Results	Project Targets	Results (Deliverables)	MTR Assess	Justification for rating
		the design works, until the concerns and grievances of impacted communities would be addressed; now waiting for a new site to be found and approved.		
	<ul style="list-style-type: none"> Kotayk national HW management site utilized for general HW management activities on a sustainable basis. 	<ul style="list-style-type: none"> Following consultations with the Hradzan community and local NGOs where the Kotayk site for hazardous waste would be located, the proposal was rejected. The municipality of Yerevan, the Ministry of Emergency Situations and the project team are exploring other options in the proximity of the Nubarashen site, including an abandoned chemical factory close to the capital city. Activities to meet these targets may also be hampered in the near future by the availability of co-financing. Out of a total of USD 3.36M to implement outcome 1.2, USD 3.1M is expected to be co-financed. 		<ul style="list-style-type: none"> Considering that only about 12 months of implementation are left, it is doubtful that this target can be achieved within the current timeframe of the project.
	<ul style="list-style-type: none"> Secure receiving and storage of any contingency volumes of Category 1 pesticide waste and OP stockpiles from Nubarashen and OP stockpile site remediation operations. Handling and export shipment of any contingency volumes of Category 1 pesticide waste and OP stockpiles from Nubarashen and OP stockpile site remediation operations for environmentally sound destruction. 			
	<ul style="list-style-type: none"> Secure receiving and secure storage of approximately 100 t amount of additional soil highly contaminated with POPs (pesticide) from OP storehouse cleanup activities. Treatment and remediation of at least 7,100 t of Category 2 material from Nubarashen and OP storage site clean-ups or alternatively export of this material to suitable treatment and remediation facilities elsewhere. 			

Expected Results	Project Targets	Results (Deliverables)	MTR Assess	Justification for rating
	<ul style="list-style-type: none"> Sustainable operational capability for hazardous chemical waste management facility in place 			
	<ul style="list-style-type: none"> 2 public consultation events held and 5 public documents/web/media products delivered 	<ul style="list-style-type: none"> Following the announcement of a tender for the selection of an engineering/environmental company to design the construction of a hazardous chemical waste storage facility to be located near the city of Hrazdan in Kotayk marz, comments/grievances were expressed by environmental NGOs and community members on the risks related to the treatment of highly contaminated material and the establishment of a hazardous waste processing technology near the city of Hrazdan. In response to these comments/grievances, three public consultation meetings were organized: one on October 11, 2016 at the Ministry of Nature Protection with the participation of 21 persons (9 women and 12 men); one on October 22, 2016 with the participation of 21 persons (14 women and 7 men), and one at the Yerevan Aarhus Centre on May 16, 2017. These meetings included the presence of representatives from environmental NGOs and impacted communities and other stakeholders. Detailed background and technical information on the necessity and the urgency to remove the POPs/OPs hazardous waste from the Nubarashen burial site and the establishment of a temporary storage facility were shared among all participants and discussed and questions raised on technical, financial, and policy solutions were answered. An information leaflet entitled “<i>Resolving the Problem of Obsolete Pesticides as a National Priority</i>” was published by the NGO AWHHE with support from the project and the GEF-SGP. It was presented during the public consultation at Yerevan Aarhus Centre on May 16, 2017. 2 additional public-information leaflets: 1) <i>Ensuring the Safety of Obsolete Pesticides</i>; 2) <i>Storage of Obsolete Pesticides intended for awareness/prior notification of potential impact communities in Kotayk region</i> were prepared with project support. A follow-up meeting with the concerned public, led by the “<i>Civic Initiative</i>” group of Hrazdan community, was held at MNP on May 23, 2017 and was dedicated to issues of public risk perception and risk mitigation measures in light of the planned HW storage/management facility in Kotayk. 		<ul style="list-style-type: none"> More activities should take place in the future and the target should be achieved.

Expected Results	Project Targets	Results (Deliverables)	MTR Assess	Justification for rating
		<ul style="list-style-type: none"> Despite some consensus at these consultations on the need to address this POPs/OPs issue, no final agreement was found to proceed with this site in Kotayk. As a follow up measure, the project implementation team decided to convene public discussions involving communities prior to each major initiative/undertaking supported by the Project to clarify the plans and activities to be undertaken. 		
Outcome 1.3: Remaining significant historical OP storehouses have OP stocks packaged and removed and residual site contamination cleaned up.	<ul style="list-style-type: none"> Under MOA supervision all former OP stores are maintained in other productive uses. Detailed contaminated site and risk assessments and remediation/clean up designs on identified on up to 6 priority sites completed/documented Excavation/removal, remediation and/or containment of 200 t of contaminated soil from up to 6 identified priority sites completed 6 public consultation events held at 6 priority sites 	<ul style="list-style-type: none"> Activities to be conducted under this <i>Outcome 1.3 - Remaining significant historical OP storehouses have OP stocks packaged and removed for destruction and residual site contamination cleaned up</i> – are to be fully funded by other sources of funds (USD 875k). So far no funds have been identified and no activities have taken place. 		<ul style="list-style-type: none"> Considering that only about 12 months of implementation are left, it is doubtful that this target can be achieved within the current timeframe of the project.
Component 2 – Obsolete Pesticide Stockpile and Waste Elimination.				
Outcome 2.1: Removal from Armenia of all substantially all high priority POPs pesticides, associate very high concentration wastes and OP stockpiles.	<ul style="list-style-type: none"> Shipment and environmental sound destruction of any contingency volumes of Category 1 pesticide waste and OP stockpiles from Nubarashen and OP stockpile site remediation operations at qualified competitive export destruction facility. 	<ul style="list-style-type: none"> Activities to meet this target will only be conducted once the excavation of the Nubarashen site will commence and the highly contaminated material (Category 1 hazardous waste) be securely stored in a temporary storage facility. In the meantime, the export of Category 1 POPs waste (pure pesticides) faces transit issues through tier countries such as Georgia and Iran. Currently, Georgia's legislation does not allow the transit of hazardous waste coming from another country. A legislation change is needed. Iran 		<ul style="list-style-type: none"> Considering that only about 12 months of implementation are left, it is doubtful that this target can be achieved within the

Expected Results	Project Targets	Results (Deliverables)	MTR Assess	Justification for rating
		<p>could be an option to transit the waste going to Europe to be disposed of or be treated in Isfahan where a POPs treatment facility exists.</p> <ul style="list-style-type: none"> The technical specifications/TORs for the “<i>clean-up/disposal services for pesticide contaminated soil from the Nubarashen site, Yerevan, Armenia</i>” has been developed, including the selection of treatment technology for highly contaminated soil, is ready to be announced. 		current timeframe of the project.
Outcome 2.2: Environmentally sound remediation of heavily POPs pesticide contaminated soil inclusive of destruction of extracted POPs pesticides demonstrated.	<ul style="list-style-type: none"> Shipment and environmental sound destruction of 7,100 t of Category 2 heavily contaminated POPs contaminated soil (POPs pesticide waste) remediated to levels below the low POPs content at the Kotayk site and returned/contained on the Nubarashen site, or exported to a qualified facility. 	<ul style="list-style-type: none"> Activities to meet this target will only be conducted once the excavation of the Nubarashen site will commence and the highly contaminated material (Category 2 hazardous waste) be securely stored in a temporary storage facility. Parallel to the process of selecting a site to securely store highly contaminated material, a number of Category 2 soil treatment technologies are being assessed in order to understand their suitability to the technical and practical conditions of the Nubarashen site as well as the costs, which has a direct impact on the financing and co-financing of such technologies. A Roadmap was developed for the selection of a technology for Category 2 POPs contaminated soil in Nubarashen, Armenia 		<ul style="list-style-type: none"> Considering that only about 12 months of implementation are left, it is doubtful that this target can be achieved within the current timeframe of the project.
	<ul style="list-style-type: none"> 20 national technical personal operationally qualified and experienced on a modern contaminated soil treatment/remediation technology. Commercial service provider capability available for other contaminated soil treatment/remediation projects in Armenia. 	<ul style="list-style-type: none"> Activities to meet this target will only be conducted once the Category 2 soil treatment technologies will be selected and supplied. 		<ul style="list-style-type: none"> Considering that only about 12 months of implementation are left, it is doubtful that this target can be achieved within the current timeframe of the project.
Component 3 – Institutional and Regulatory Capacity Strengthening for Sound Chemicals Management and Contaminated Sites.				
Outcome 3.1: Legal/regulatory and technical guidance tools for	<ul style="list-style-type: none"> (List of specific legislative and regulatory measures to be provided by MNP/UNDP CO) 	<ul style="list-style-type: none"> Legal regulatory expertise provided on: <ul style="list-style-type: none"> a) National regulatory/normative and institutional framework, procedures and mechanisms, including enforcement and control systems, 		<ul style="list-style-type: none"> More activities should take place in the future and the

Expected Results	Project Targets	Results (Deliverables)	MTR Assess	Justification for rating
management of chemical wastes, including POPs, and, contaminated sites management within a national sound chemicals management framework strengthened.		<p>regulating chemical HW management operations in Armenia, in countries of transit and final destination for destruction;</p> <p>b) Related licensing and other institutional liability issues;</p> <p>c) Drafting of new regulatory/normative act(s) or amendments to the existing ones;</p> <p>d) Establishment of in-country institutional (interagency) coordination mechanisms;</p> <p>e) Procedures for managing/handling (packaging, labeling, storage/warehousing, transportation, destruction, treatment, disposal/export, etc.) of POPs/Ops, chemical HW, etc.</p> <ul style="list-style-type: none"> • Mayor's Decree and masterplan were issued (27/06/2016) for the identification and use of the Nubarashen site and surroundings. • Reviewed, analyzed and mapped relevant national legislation and international requirements on activities related to hazardous waste handling, treatment/ neutralization, storage, transportation and disposal. • Drafted and provided technical recommendations/guidelines for POPs/chemicals waste handling, transportation, storage, disposal and management requirements. • Supported the drafting of the unified bilateral Statements of Intent (SoI) by the Municipality of Yerevan and the Ministry of Emergency Situations. • Supported initiation of regulatory reviews on national Environmental Impact Assessment (EIA) procedures; expert examination procedures, and national licensing on dealing with hazardous waste handling, recycling, treatment/neutralization, storage, transportation and disposal. 		target should be achieved.
	<ul style="list-style-type: none"> • Adopted guidance materials operational and EHS procedures for hazardous chemicals waste handling, transport, storage and disposal consistent with international practice implemented. • National training program delivered to at least 50 relevant technical personnel in regulatory and private sector service provider positions who 	<ul style="list-style-type: none"> • On November 23-24, 2016 a training seminar on "<i>Urban-development, environmental and health requirements/norms related to the design, subsequent operation and maintenance of the projected hazardous chemical waste management and storage facility in the Republic of Armenia</i>" was conducted. Over 30 participants (50% women), representing private design/consulting companies, MES/MNP staff, industry, public authorities, local universities, other project stakeholders and CSOs, attended the seminar and received certificates. All the training materials and supplementary/reference documents were delivered to the participants electronically. The participants highly rated the seminar. 		<ul style="list-style-type: none"> • More activities should take place in the future and the target should be achieved.

Expected Results	Project Targets	Results (Deliverables)	MTR Assess	Justification for rating
	would attain relevant certification.	<ul style="list-style-type: none"> On April 17, 2017 a special seminar was conducted on “<i>Risk Assessment of Nubarashen Burial Site Clean-up Design and Remedy Measures</i>”. It also included case-studies from different countries. This seminar was followed the next day by a consultative session with representatives of the design company “Electronnakhagits” CJSC to review the first conceptual design drawings of Kotayk storage facility. On April 18-19, 2017, a training seminar on “<i>Technical Requirements and Environmental, Health and Safety Aspects for Hazardous Chemicals/Waste Storage Facilities in the View of International Practices</i>” was held. About 25 participants (13 men, 12 women), representing private design/consulting companies, MES/MNP staff, industry, public authorities and other project stakeholders and CSOs, attended the seminar and received certificates. All the training materials and supplementary/reference documents were delivered to the participants electronically. On April 10-12, 2017, technical discussions were held with an expert on: (1) General overview of soil treatment technologies and remediation techniques (ex-situ, in-situ, off-site, etc.); (2) Feasible / applicable options for Armenia (Nubarashen site); (3) Presentation on previous experiences under similar projects; and (4) Soil sampling requirements and testing procedures. 		
	<ul style="list-style-type: none"> Adopted guidance materials on environmental and health risk assessment methodologies and practices applicable to hazardous waste stockpiles and contaminated sites developed in accordance with international practice implemented. Training of at least 50 professionals from regulatory authorities, academia, NGOs and environmental service providers 	<ul style="list-style-type: none"> As presented above, several training events were conducted but so far focusing more on risks assessment of managing highly contaminated waste and including a review of international best practices. 		<ul style="list-style-type: none"> More activities should take place in the future and the target should be achieved.

Expected Results	Project Targets	Results (Deliverables)	MTR Assess	Justification for rating
Outcome 3.2: Technical/Environmental performance evaluation and upgrading requirements for existing national destruction capacity.	<ul style="list-style-type: none"> Full test burn program completed and licensing decisions made on an expanded menu of HW made. A technical assessment and upgrading investment plan is completed for purposes of improving facility efficiency and environmental performance including potential application to chlorinated waste streams. 	<ul style="list-style-type: none"> Conducted preliminary assessment (screening) in 2016 of two national operating medical/pharmaceutical waste incineration facilities: “EcoProtect” and “Ekologia V.K.H.”. The latter is also incinerating limited quantities of chemical waste (from labs, customs, small production, etc.). The preliminary technical assessment revealed that both facilities have no adequate technical capacity and special emissions control equipment (waste gas clean-up/absorption units) to be able to incinerate larger quantities of hazardous chemical waste, such as chlorinated POPs/obsolete pesticides in an environmentally sound manner, to meet the requirements of the Stockholm Convention. The implementation of activities under this outcome 3.2 may be hampered by the lack of co-financing. Out of a total budget for this outcome of USD 2.93M, USD 2.83M is to be co-financed by other sources. 		<ul style="list-style-type: none"> Considering that only about 12 months of implementation are left, it is doubtful that this target can be achieved within the current timeframe of the project. Additionally, sourcing co-financing is needed to finance these activities.
Outcome 3.3: Basic national capacity for effective hazardous chemicals sampling and analysis for multi-environmental media and contaminated sites in place, operational and certified to international standards.	<ul style="list-style-type: none"> National strategy implemented as reflected by availability of effective support capability for sound chemicals management particular hazardous waste management and contaminated sites. 	<ul style="list-style-type: none"> Developed a strategy for the operational optimization and upgrading of the national laboratory (analytical) capacity on POPs and hazardous chemical waste in Armenia. This strategy includes: (a) improvement of management capabilities; (b) development of an outline for relevant QA/QC procedures applied in chemical waste/POPs analyses; (c) provision of limited commodity support to improve analytical capacities on waste/POPs with an overall objective to achieve international certification of the laboratory, as well as a recommended list and specifications of equipment and consumables to be provided by the Project as commodity support. 		<ul style="list-style-type: none"> More activities should take place in the future and the target should be achieved.
	<ul style="list-style-type: none"> Three designated laboratories upgraded and operational. Long term national budget commitments and/or business plans in place ensuring sustainable operation 	<ul style="list-style-type: none"> A workshop on “Soil Sampling and Lab QA/AC” was delivered on August 23-25, 2017, both in classroom and on-site (2-day theoretical training and 1-day practical training on-site at Nubarashen burial site) with the participation of 29 participants (15 women, 14 men), representing various national laboratories and relevant institutional units. 		<ul style="list-style-type: none"> Considering that only about 12 months of implementation are left, it is doubtful that this target can be achieved within the current timeframe of the project. Additionally, sourcing co-financing is needed
	<ul style="list-style-type: none"> 15 additional key laboratory personal from designated laboratories trained 	<ul style="list-style-type: none"> The implementation of activities to meet this target may be hampered by the lack of co-financing. Out of a total budget for this set of activities of USD 1.54M, USD 1.5M is to be co-financed by other sources. 		

Expected Results	Project Targets	Results (Deliverables)	MTR Assess	Justification for rating
				to finance these activities.
	<ul style="list-style-type: none"> 3 designated laboratories achieved full international certification 	<ul style="list-style-type: none"> Recommendations for international certification/accreditation of the merged national laboratories of the state Environmental Monitoring and Information Center SNCO (under the coordination of MNP) are included in the developed Strategy for operational optimization and upgrading of the national laboratory (analytical) capacity on POPs and hazardous chemical waste in Armenia. 		<ul style="list-style-type: none"> Considering that only about 12 months of implementation are left, it is doubtful that this target can be achieved within the current timeframe of the project. Additionally, sourcing co-financing is needed to finance these activities.
Component 4 – Monitoring, learning, adaptive feedback, outreach, and evaluation.				
Outcome 4.1: Monitoring, learning, adaptive feedback, outreach, and evaluation.	<ul style="list-style-type: none"> Final evaluation report ready in the end of project 	<ul style="list-style-type: none"> Progress has been reported as required, including the Annual Project Review (APR) / Project Implementation Report (PIR) for 2016 and 2017 Annual Outcome Board review of project milestones, based on the UNDP mid- and end-year Standard Progress Reports Information exchange initiated with experienced teams in Belarus and Georgia on their previous GEF experience, as well as from the Czech Republic. 		<ul style="list-style-type: none"> More activities should take place in the future and the target will be achieved.

Source: Adapted from project progress reports, mostly from PIR 2016 and PIR 2017 and information collected during the mission in Armenia.

62. Overall, the project has made little progress towards its targets and it has about one year of implementation left before its official ending date of May 2019. Yet the elapsed time of the project implementation so far is about 33 months (to end of February 2018) or about 69% of the total time to implement this project (48 months). The project has faced some critical issues since its outset. The most critical issues so far, which delayed the implementation include:

- The tender process to select an international environmental/engineering company for conducting a detailed site assessment and design of the Nubarashen burial site clean-up works. A first tender was issued in early 2016 but due to difficulties to make a final decision on the winner, the tender was cancelled. A revised tender was issued again at the end of 2016. A consortium was selected and started the assessment in August 2017. This delay has affected the entire implementation of the project since no other major activities such as excavate, securely store, and dispose of/treat hazardous material could take place before the assessment is completed.
- The tender package for the development of a centralized national hazardous chemical waste storage and management facility was developed and announced in August 2016. Due to public demand for changes in the TORs and the high cost of received financial proposals the tender was cancelled. The revised RFP were re-announced on December 20, 2016. A contract was signed in April 2017 and the work started hereafter. This delay affected the preparation and construction of the temporary storage of highly contaminated material facility.

63. These delays were then compounded by an unexpected negative reaction from the communities near the Kotayk site, which had been selected as the location for the temporary storage facility. Despite consultations with the Hradzan community and local NGOs, including attempts to address public concerns, the proposal to construct a temporary hazardous waste site in Kotayk was rejected. The municipality of Yerevan and the Ministry of Emergency Situations are now exploring other options in the proximity of the Nubarashen site, including an abandoned chemical factory close to the capital city. As of the time of this MTR no site has been identified/approved yet, further delaying other activities of the project, since the Nubarashen site cannot be excavated until the contaminated material can be securely transported and stored in a temporary site.

64. Finally, adding to these critical delays and as discussed in section 4.1.2, there are also two other existing issues faced by the project:

- *Arranging export for the destruction of high concentration material:* As a land-locked country Armenia needs to find a transit country to transport its highly contaminated hazardous wastes to their final destination to be disposed of. Two countries are a possibility: Georgia and Iran. However, currently, Georgia's legislation does not seem to allow the transit of hazardous waste coming from another country. A legislation change is needed. Iran could be an option to transit the waste going to Europe to be disposed of or be destructed in an existing POPs/chemical waste incineration facility near Isfahan. However no final route has been identified yet.
- *Mobilization of USD 19.3M as co-financing:* This co-financing include a mix of in-kind and cash co-financing and for the most part it was planned to come from the government budget. No process to include this cash needs in the national budget had taken place since the project started. However, the project design is such that there is a clear funding plan for each key activity, which, if not funded, will not be implemented. This situation will affect the implementation of the project due mostly to the fact that lots of activities need to be implemented sequentially (*see more in Section 4.3.4*).

65. The cumulative effect of these delays, the critical issues faced by the project and the elapsed time are the main reasons explaining the assessment made in the table above using the "traffic light system" code. Within the current given timeframe to implement the project it is quite clear that many targets will not be achieved by May 2019 and therefore are rated red as "Not on target to be achieved". At this point in time, except unforeseen development, the full completion of the project by May 2019 should be ruled-out; it will take more time to complete the project and a time extension is recommended.

66. As of March 2018, the status of the project is as follows:

- A soon-to-be-fully completed detailed technical and costing definition of the required works to:
 - i) complete the environmentally sound removal of highly contaminated POPs pesticides and OPs

from the Nubarashen burial site for off-site management; ii) design solutions for the secure excavation, packaging, containment of residual contamination and potentially treated soils; and iii) restore the site in a form suitable for an agreed future land use inclusive of its stabilization to prevent future risks from geotechnical instability. This assessment will provide critical information on quantities to be treated and/or disposed of, on technologies to treat Category 2 material, on risks involved with the clean-up of the Nubarashen site and on the conditions to contain and monitor the site after the excavation of the highly contaminated material (categories 1 and 2) and, finally, on costed options to address this POPs legacy issue.

- The government is in the process of identifying a new site for this storage facility. A decision should be made in the near future.
- A contract with a company is in place to design and plan the development of a national hazardous chemical waste storage/management facility. As soon as a new site is approved/accepted, the design work to construct a storage facility can start.
- The technical specifications/TORs for the *“clean-up/disposal services for pesticide contaminated soil from the Nubarashen site, Yerevan, Armenia”*, including the selection of treatment technology for highly contaminated soil, are available and ready to be announced for recruiting a firm for the clean-up/disposal of hazardous waste to be excavated from the Nubarashen site.

67. These four points are critical for the project to go forward. However, there are also a few bottlenecks that will need to be removed before the project can make any progress toward its stated targets. They include:

- The decision to identify, assess and approve a new site for constructing a hazardous waste storage facility may take longer. It is a “critical” task; i.e. without this approved site, the storage facility cannot be developed and the Nubarashen site cannot be cleaned-up and, therefore, will delay the project further.
- No clear routes have been yet identified for transporting and disposing of highly contaminated material (Category 1). When considering the geographical position of Armenia, it is a complex set of financial, technical and political issues to be resolved. Moreover, as long as no proper route is identified, a key question was raised during the mission of the Evaluator in Armenia *“could/should the excavation of the Nubarashen burial site start before a clear route to transport/export Category 1 material is identified?”*.
- Based on interviews conducted for this MTR, no cash co-financing is available so far. Moreover, the prospect of getting cash in the coming 1-2 years from the government is very limited; mostly relying on the operational budgets of the ministries (MNP and MES) and municipalities involved in the clean-up. Some “critical” tasks are to be funded by other sources of funding (i.e. not by the GEF grant). As long as these tasks will not be implemented, other parts of the project will also not be able to move forward.

68. In conclusion, after 2/3 of the total elapsed time to implement the project, the progress has been slow, mostly due to delays in recruiting firms to conduct some key activities of the project. The good news is that despite 69% of the time have passed, only 9.3% of the GEF grant has been expended as of the end of February 2018 (*see more in Section 4.3.4*). However, in addition to these delays, the project has also been facing some critical bottlenecks, which are currently hampering the progress of the project. One of the current key bottleneck is the decision for a new site to construct a secure storage site for hazardous material. Nevertheless, key tasks are now in place or completed, particularly the extensive assessment of the Nubarashen site, which provides critical information to move the project forward and to plan the clean-up phase that is representing about 72% of the GEF grant.

4.2.2. Remaining Barriers to Achieve the Project Objective

69. The project started in June 2015 and will end in May 2019. At the time of this review, the project is in its 33rd month of implementation with 15 more months to go before it ends. As discussed in the previous section, progress has been slow so far. Nevertheless, after some critical operational delays, the project has now accumulated much information on the quantities that needed to be treated/disposed of, on the options available, on the technologies to treat in-country Category 2 hazardous material and on the conditions to contain the Nubarashen site once it will be excavated. This information is critical for the next phase that is to plan and launch the clean-up phase.

70. However, to move the implementation forward, the three bottlenecks discussed above need to be solved: (i) the construction of a temporary hazardous waste storage site can only be assessed and constructed once it will be identified; (ii) co-financing needs to be identified to finance the construction of this temporary storage site; and (iii) a transit route needs to be identified to export Category 1 hazardous waste once it will be excavated, packaged and ready to be transported to its final destination to be disposed of.

71. These issues are still critical but not insurmountable. Over 90% of the GEF grant is still available as of the end of February 2018; a project team is operational, a Project Management Board has been providing oversight to the implementation of the project; and a Technical Advisory Committee was set to review the technical aspects of the project, helping the development of consensus-based decisions. The project is at an important cross-road point and with a time extension, it is still possible to achieve its objective.

72. In addition to the part of the project focusing on the clean-up/treatment/dispose of hazardous waste, the rationale of the project was also to address other barriers existing in Armenia at the time of the design of the project. Five barriers were identified; mostly related to the management of hazardous waste and chemicals in general in Armenia:

- Institutional barriers: absent role of local authorities, overriding licensing and environmental approval, processing imperatives, etc.
- Legal and regulatory barriers: overlaps, conflicts and gaps
- Low level of Information and awareness related to POPs pesticides and OP issues.
- Deficits in technical capacity and supporting infrastructure
- Lack of effective financial resources

73. Activities under component 3 aim at addressing these barriers. The review conducted for this MTR indicates that some contributions were made to remove part of these barriers. However, much is still left to do to remove these barriers in a significant way. When considering the current enabling environment for the management of chemicals in Armenia, it is recommended to focus on the strategies in place led by the recently approved National Implementation Plan (NIP) and ensure that adequate financial resources are made available to the responsible parties. The budgetary process is functioning on a three-year rolling cycle and any budget need – particularly any new budget need – can only be included in the Medium-Term Expenditures Framework (MTEF) following a dialogue at the government level and decision(s) to make it a national priority.

74. The review of the progress made by the project toward its expected results indicates that key issues/bottlenecks have been hampering the progress. Delays in the past 33 months are mostly due to delays in recruiting 2 firms (or consortia) to undertake the necessary assessment of the Nubarashen site and the assessment and plan to construct a hazardous waste temporary storage site. Close to a year has been lost with these delays. Nevertheless, the project is now at a cross-road in its implementation. It has all the information needed to proceed with the clean-up/treatment/dispose of, which is the key elements to complete for the project to succeed. However, there are now three key issues that need to be resolved soon in order for the project to move forward. It is recommended: (i) the project implementation team to prepare a strategic document using the information available, to plan the key phases to undertake with key milestones, and the funds – both GEF grant and other sources - needed to finance this remaining tasks. (ii) organize a high level meeting with the PMB that should be led by the Inter-Agency Committee on the Implementation of the SC with the presentation and discussion/decision on the strategic document.

4.3. Project Implementation and Adaptive Management

75. This section discusses the assessment of how the project has been implemented. It assessed how efficient the management of the project has been and how conducive it is to contribute to a successful project implementation.

4.3.1. Management Arrangements

76. The implementation modality of the project to allocate, administer and report on project resources is the “UNDP Country Office Support to National Implementation Modality (NIM)” approach; that is project activities are carried out by the Project Team in partnership with MNP and MES and reporting to UNDP as

per the guidelines. Overall, roles and responsibilities were clearly identified and accepted, including the need to follow administrative procedures from UNDP.

77. The management arrangements of the project is as follows:

- The *GEF Agency* for this project is UNDP. At the request of the Government of Armenia, UNDP provides *Direct Project Services (DPS)*, including procurement and contracting, human resources management, and financial services;
- The *Implementing Partners* of the project are the Ministry of Nature Protection (MNP) and the Ministry of Emergency Situations (MES). They represent the project ownership. As described in the project document, MNP has overall legal and regulatory authority for hazardous waste and contaminated sites management, as well as the licensing and approval process required to actually undertake the work at both Nubarashen and related to obsolete pesticides stockpile sites. It serves as the focal point ministry for the relevant international conventions, in particular Stockholm and Basel conventions, and the evolving national chemicals management framework. MES is the primary operational proponent for work on the Nubarashen burial site based on the emergency order of the government mandated them to ensure public safety.
- The project is guided by a *Project Management Board (PMB)* as the executive decision-making body of the project. The PB is responsible for making consensus based decisions, in particular when guidance is required by the Project Coordinator (PC). The PMB plays a critical role in project monitoring and evaluations by assuring the quality of these processes and associated products for improving performance, accountability and learning. The PMB ensures that required resources are committed and it arbitrates on any conflicts within the project and negotiate solutions to any problems with external bodies. Decisions made by the PMB are made in accordance with UNDP standards, ensuring UNDP's ultimate accountability for project results. Specific responsibilities were identified at the outset of the project on processes related to start-up, running and closing the project. The PB met four times since the inception of the project: January 19, 2016; November 7, 2016; April 4, 2017; and June 16, 2017. The PMB has 8 permanent members plus observers as needed; on average 15 to 20 stakeholders participate to the PMB meetings. It is co-chaired by the representatives from MNP and MES. One odd observation made during this MTR is that the focal point of the Stockholm convention who is also the Head of the Hazardous Substances and Waste Policy Division at MNP is neither a member of the PMB, nor a member of the Project Advisory Committee.
- A *Project Implementation Unit (PIU)* was established at the beginning of the project; it is located on the premises of the UN House in Yerevan. It is headed by a Project Coordinator (PC) and provides project administration, management and technical support for day-to-day operations of the project. The unit is composed of the following staff (*all funded by the GEF funds*):
 - i. Project Coordinator (PC) – Full time
 - ii. Finance & Administration Officer – Full time
 - iii. Technical Task Leader – Full time
 - iv. Civil Engineer Consultant – Part time
 - v. International Adviser – Part time
- A *Project Coordinator (PC)* was hired by UNDP and approved by the PMB. She is tasked with the day-to-day management of project activities, as well as with financial and administrative reporting. She is responsible for project implementation and will be guided by Annual Work Plans, following UNDP Results Based Management (RBM) standards. The Project Coordinator prepares Annual Work Plans (AWPs) in advance of each successive year and submit them to the PMB for approval.
- A *Project Advisory Committee (PAC)* was formed in 2017; it is composed of 15 members representing all key stakeholders. Its main function is to provide technical assistance to the project implementation team. It has only met formally once so far (a joint meeting with the PMB on June 16, 2017) but members are consulted regularly by the PC to discuss technical issues.

78. The review indicates that the management arrangements as planned at the outset of the project should be adequate in the context of Armenia. The project is implemented by a technical team of professionals assembling a broad range of skills and knowledge and the project benefits from a good partnership between the government – in this case the MNP and MES as the implementing partners of the project but also other

government stakeholders – and UNDP. In addition, the stakeholder review conducted during the PPG phase, identified the “*Inter-Agency Committee on the Implementation of the SC*”. This committee was created in 2010 and, considering its role, it was anticipated that it will also oversee the project and serve as a vehicle for facilitating the institutional stakeholder engagement and coordination, achieving collective decision-making on key issues, as well as resolving several potentially critical issues related to regulatory jurisdiction and authority that could be counterproductive to the implementation of the project.

79. However, despite adequate management arrangements, following interviews conducted for this MTR, the Evaluator found that the PMB does not seem to be at the center of the decision-making process as the executive decision-making body of the project. Despite that the PMB meets twice a year, too much implementation responsibilities seem to reside with the Project Coordinator. It is certain that as the Coordinator, the PC plays a key role in the implementation of the project. Through her role of coordinating the project, the PC dispose of the overall knowledge that is being accumulated by the project and, due to her position, is in a better cross-institution position that any other stakeholders. However, too much decision making is concentrated at her level and a more distributed decision-making process is needed.

80. Moreover, as the project has been slow to be implemented and the project office being based at the UN House, the project lacks visibility with partners. The 2 PMB meetings per year are not enough to make the project visible. It is recommended that a sub-set of PMB members (MNP, MES, Municipality of Yerevan and UNDP) meets more often such as once a quarter to better distribute the decision-making process and strengthen the PMB as the decision-making center of the project. It is also recommended to review the location of the office and, as much as possible, try to find a location within a government department.

81. Otherwise, when considering the implementation issues faced by the implementation team, the project has been well managed. The implementation team follows UNDP-GEF procedures for the implementation of the project and has been using adaptive management to try secure project deliverables while maintaining adherence to the overall project design. The Strategic Results Framework included in the project document has been used as a guide for the implementation of the project, though the complex structure of the project strategy and the overall lengthy documentation in the project document did not help for an efficient implementation.

82. Adaptive management was used regularly to adapt to changes that occurred almost regularly since the outset of the project. It is the case with the two tender processes which both had to be cancelled and re-issued. It is also the case for the development of the hazardous waste temporary storage site. Initially, the location was to be Kotayk. However, following few consultations with local communities and environmental NGOs, the site was refused. The project is now working with the government to find another appropriate site. Overall, the Evaluator also noted that adaptive management was used to keep project expenditures as low as possible to keep the budget in line with the slow progress, in order to keep the GEF grant resources available for when the large clean-up phase will go ahead.

UNDP Delegation of Authority (DOA)

83. The Evaluator also reviewed the delegation of authority (DOA) between the Headquarters UNDP-GEF Office and the UNDP Country Office in Armenia. This DOA is dated April 23, 2015 that is just before the project document was signed by the government of Armenia and UNDP. In addition to the regular clauses to delegate the responsibilities to the country office to sign the project document on behalf of UNDP, it includes a set of conditionality clauses. Due to the risks in implementing this project with its innovative characters in the POPs focal area, these clauses refer to the planned investment resources (GEF and non-GEF sources) for the implementation of the project to ensure that the project be implemented in its full design as approved by the GEF.

84. The DOA acknowledges that the project retain substantive uncertainties with respect to the sourcing and availability of co-financing as well as the allocation and timing of GEF and non-GEF funding. It clearly states that the GEF funds cannot replace other sources of funding in the absence of committed co-financing. It is said to be an unacceptable risk and contrary to UNDP’s fiduciary duty as a GEF Implementing Agency. Furthermore, the DOA states that an initial period of 18 months was set to develop and execute an inception detailed planning phase with a budget that should not exceed USD 500k. The content of this inception detailed planning phase was also detailed in this DOA.

85. The review conducted for this MTR indicate that the DOA is not really clear on what will happen if the co-financing is not made available on time. It only states that if major changes are required, including co-financing arrangements, it may require these changes to be reviewed by the GEF Council with the possibility of the cancellation of the project. As it stands today, 33 months have passed and the project expended about USD 440k of the GEF grant to implement most of the tasks indicated in the DOA. However, no concrete positive results can be reported on the co-financing availability. As this DOA is still active, it is recommended to review the overall situation and organize - in strong collaboration with the government - a strategic review of the project and develop a roadmap to move forward with the identification of all funding sources.

4.3.2. Stakeholder Engagement

86. The project was developed through stakeholders' consultations that started with the preparation of the PIF and continued during the PPG phase. It included assessment of institutional stakeholders in the context of their statutory involvement in the project, and more broadly of non-government stakeholders including affected publics. Three major workshops were held during the PPG phase: a PPG inception workshop in December 2012; a technical planning workshop in March 2013; and a draft project document stakeholders consultation workshop in January 2014. Additionally, a formal stakeholder analysis was undertaken as part of an OSCE funded project by the Armenian Women for Health and a Healthy Environment (AWHHE) association; this information also provided valuable guidance in the project's stakeholder analysis documented in the project document. The results of this stakeholder analysis allowed the identification of key stakeholders and their potential respective roles and functions in the implementation of this project. The table below is a summary of the plan to involve stakeholders developed at the outset of the project.

Table 6: Initial Stakeholders Involvement Plan

Stakeholder	Roles and Functions
Ministry of Nature Protection: <ul style="list-style-type: none"> Hazardous Policy and Waste Policy Division National Environmental Inspectorate Bio-Resource Management Agency Waste and Atmosphere Emissions Management Agency "Environmental Impact Monitoring Center" SNCO (ArmEcoMonitoring) SNCO "Wastes Research Centre" 	<ul style="list-style-type: none"> Responsible for general waste management with legislated staff positions Oversee the national waste management Implementation of international Chemicals and Waste Conventions: Stockholm Convention, Rotterdam Convention, Basel Convention Oversee Non-for Profit supporting organizations such as the Environmental Impact Monitoring Center" SNCO (ArmEcoMonitoring); and the Waste Research Centre Chair the Inter-Agency Committee on the Implementation of the SC Supervise jointly with the Ministry of Health the compliance with the requirements and conditions licenses for processing, decontamination, storage, transportation and placement of hazardous waste
Ministry of Emergency Situations: <ul style="list-style-type: none"> Armenian Rescue Service 	<ul style="list-style-type: none"> Provides preventive measures for the protection of the population Establish rescue forces for rescue activities and professional aid to the population, keep these in a constant readiness, inclusive of state, NGO and institutional rescue units that in emergency situations they operate under centralized command and control within reasonable risk Supervise operational direction and coordination of solid waste management facilities development policy and financing specifically for municipal waste management activities
Ministry of Agriculture: <ul style="list-style-type: none"> Division of Plant Production and Plant Protection 	<ul style="list-style-type: none"> Regulatory supervision of the storage, handling and storage safe use of agro-chemicals including pesticides. Establishment of a working group for the coordination of the disposal of obsolete pesticides developing an action plan for the disposal of these substances including the accounting of obsolete pesticides within three Nominal ownership and custody of state assets formally used for the storage of pesticides.

Stakeholder	Roles and Functions
Ministry of Health	<ul style="list-style-type: none"> General waste management, including the approval of the sites for waste management facilities Administration of rules and norms on the management of hazardous chemical waste and the requirements to storage and shipment of hazardous chemical waste
Ministry of Transportation and Communications	<ul style="list-style-type: none"> Permitting the shipment of hazardous cargo including hazardous waste by road
Ministry of Foreign Affairs: <ul style="list-style-type: none"> International Organizations Department 	<ul style="list-style-type: none"> Coordinating responsibility for activities of diplomatically accredited international organizations operating in Armenia and bi-lateral relations related to foreign assistance
Ministry of Economy	<ul style="list-style-type: none"> Overall economic policy and planning authority with a specific interest in net economic development benefits from projects involving national and international financial commitments, and in the facilitation of public private partnerships in such developments
Ministry of Finance: <ul style="list-style-type: none"> State Revenue Committee under Ministry of Finance 	<ul style="list-style-type: none"> National authority for approval of national budget commitments as would be associated with project co-financing Responsibility for customs control as may relate to import of technology and export of waste
Ministry of Defense	<ul style="list-style-type: none"> Maintained observer status on the issue Expert participation on the Inter-Agency Committee on the Implementation of the SC through Radiological, Chemical and Biological Defense Department Potential provision of trained personnel for site operational work
National Academy of Science	<ul style="list-style-type: none"> Through institutes and laboratories supplies technical expertise and participation on relevant interagency commissions. NAS Centre for Ecological-Noosphere Studies has actively participated in addressing the issue
Republic of Armenia Police	<ul style="list-style-type: none"> Site security control functions
Local Self-Governing Bodies: <ul style="list-style-type: none"> Marz, Yerevan, and Municipal Governments 	<ul style="list-style-type: none"> General Waste Management, including issuance of permits in coordination with the authorized state body for waste disposal; compilation and maintaining of logs for waste generation, processing, disposal and utilization facilities; accounting of waste generation, decontamination, utilization and disposal and certification thereof, etc. Issuing permissions at the Marz (and City of Yerevan) level for hazardous waste storage sites such as obsolete pesticide stockpile stores in their territory

Source: project document

87. Additionally, the stakeholder analysis included the assessment of “*external non-governmental stakeholders*”. They included:

- Local communities and land holders affected by obsolete pesticides and project activities, including communities neighboring the Nubarashen site and the obsolete pesticide storage sites, and the public along transport routes
- Environmental service providers such as environment/engineering consultants, civil contractors
- Civil society organizations/ENGOS such as AWWHE, Ecolur and Khazer, women’s advocacy groups and affected public interest groups
- Academic institutions: Universities/higher education institutions, Non-government research institutes and Primary and secondary schools
- General public
- International Organizations

88. The overall conclusion of the stakeholders analysis during the design phase revealed a low awareness and interest in these chemical issues beyond the directly engaged ENGOS and some academic and service provider organizations. Associated with this was the conclusion that significant technical and management capacity development needs in all stakeholder organizations existed and that they should be addressed through

training and the dissemination of information on chemicals and their management. In the meantime, during this analysis, it was found that for the advocates of public awareness – including ENGOs and international agencies involved in these projects - it was important to strike an appropriate balance between creating awareness of risks and the critical advocacy of solutions such as an overreaction to perceived risks does not itself become a barrier to the solutions practically available.

89. This analysis also included the existence of an Inter-Agency Committee on the Implementation of the SC, which was created in 2010. At the time of the design of this project, this committee was in its infancy, yet it underlined the importance of having such an ongoing, functioning body to oversee the project and to serve as a vehicle for facilitating institutional stakeholder engagement and coordination at the national level. This committee is currently functioning and is the main body to oversee the national implementation process of the Stockholm convention and the Basel convention. However, the assessment conducted for this MTR found a limited link between the project, its PMB and this Committee. Recognizing that it is an excellent instrument for the project and its visibility within the government, it is recommended to strengthen this link, particularly the link between the PMB and the Committee by having more regular presentations at the Committee meetings on the progress of the project and possibly key issues face by the project such as the issue of co-financing.

90. Overall, the Evaluator found that stakeholders are engaged in the project despite the slow progress made so far. With the completion of the assessment of the Nubarashen burial site, the project has now lots of information to move forward. Despite this engagement, the project has a low visibility; it need to increase its visibility such as more communication with the Inter-Agency Committee on the Implementation of the SC but also through other channels (*see Section 4.3.7*).

4.3.3. Work Planning

91. Project Annual Work Plans (AWPs) were produced every year from 2015. These AWP were developed following UNDP project management guidelines, including the calendar year cycle (January to December for each year). Once finalized, these AWP were reviewed and endorsed by the PMB and approved by UNDP. These AWP details the list of main activities to be conducted during the coming year following the structure of the log frame (objective, outcomes, and outputs) of the project. For each activity, they include a tentative schedule (per month) when each activity will be implemented and a corresponding budget from the GEF grant.

92. Based on the information collected, the Evaluator compared the budgeted annual work plans with the actual annual disbursements, the results are presented in the table below:

Table 7: Annual Work Plans versus Actual Expenditures (GEF grant)

Years	AWP Budgets	Actual Expenditures	% Spent
2015	22,194	22,194	100%
2016	103,963	102,842	99%
2017	925,969	302,734	33%
2018	457,504		

Sources: Project AWP and UNDP-Atlas CDR Reports

93. Numbers presented in the table above reveal that for the first part of the project, work planning had been efficient. The project was in its initial stage and delays occurred to recruit firms (*see Section 4.2.1*). No large engagement of expenditures took place and the project implementation team kept the expenditures as low as possible. However, in 2017, the procurement delays (2 tenders) affected the work planning/budgeting for the year and only 33% of the original work plan budget was expended. Regarding 2018, the actual amount disbursed in the first 2 months of the year is just under USD 11k, leaving a budget amount of USD 446,504 for the 10 remaining months. It is high but there are commitments made through the 2 tenders and it is hoped that the clean-up phase will start this year; hence engaging larger sums of money.

94. The review of these work plans also demonstrate the complexity of the project structure (*see also Section*

4.1.2). With its 3 components divided into 9 outcomes, 34 outputs and 28 activities to be implemented, this structure renders the management, planning and monitoring of the project complex, time consuming and cumbersome for a limited value added. The 2015-2016 work plan has about 70 different planned outputs/activities and the 2017 has about 55 such planned outputs/activities. It is much too complex for such a project and particularly taking too much previous time of the Project Coordinator to plan, monitor and report against these numerous planned activities. The solution to this problem would be to simplify the structure of the project; however, at this point it may create more problems to change the management structure and its related implications for monitoring (indicators and targets) and reporting. It is not recommended to change drastically the way the project is structured and managed.

95. In section 4.1.2 of this report we also discussed the need for using management tools such as those that are used for managing civil engineering projects. For instance the use of a project management software offering features such as Gantt chart and Critical Path would provide the project with a “live” method to calculate the minimum project completion time and the start and end dates for all project tasks. A constant calculation of the critical path would immediately provide the project implementation team with valuable information on timing, including the possibility of testing different implementation scenarios. Overall, the use of these management tools would help to reduce timelines, better manage resources, and facilitate the comparison of planned versus actual progress and its impact on the overall implementation of the project.

4.3.4. Finance and Co-finance

96. As discussed in Section 4.3.1, the implementation modality of the project to allocate, administer and report on project resources is the National Implementation Modality (NIM); that is project activities are carried out by the Project Team in partnership with MNP and MES and reporting to UNDP as per the guidelines. Under this approach, the government has key control functions related to all aspects of project leadership, management and implementation (co-chairs the Project Board, considers and approves key milestones, such as annual work plans, budgets, management responses to mid-term and final evaluations, participates in monitoring, etc., as further described in the Management Arrangements). At the same time, under the National Implementation Modality, the government of Armenia has requested the provision of support services from UNDP. A letter of agreement was signed between UNDP and the government of Armenia at the outset of this project listing the services to be rendered by UNDP during the implementation of the project.

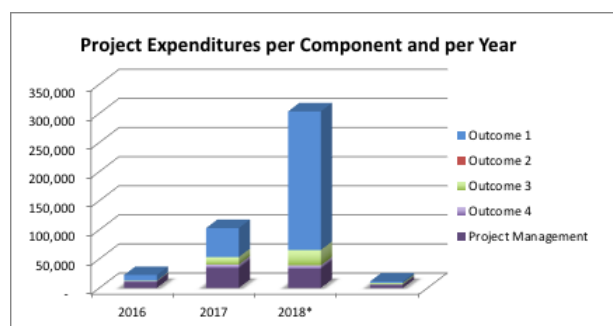
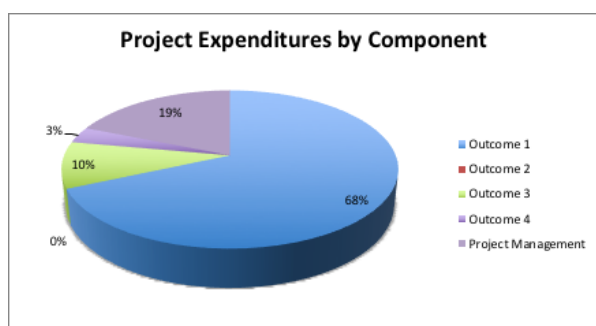
97. At the time of this evaluation, the review of financial records as recorded in the UNDP Atlas system indicates that the actual expenditures allocated against the GEF grant for the years 2015 to February 2018 represent about 9.4% (USD 439,544) of the approved budget of USD 4,700,000 versus an elapsed time of 69% (33 months out of 48). The breakdown of project expenditures by component and by year expended so far is presented in the table below.

Table 8: UNDP-GEF Project Funds Disbursement Status (in USD)

Component	Budget (USD)	2015	2016	2017	2018 ¹¹	Total (USD)	Total/ Budget
Component 1	745,000	9,649	439,733	238,168	2,854	300,403	40%
Component 2	3,390,000					-	0%
Component 3	240,000	725	12,626	26,219	2,215	41,785	17%
Component 4	100,000	1,512	6,278	5,962	977	14,729	15%
Project Management	225,000	10,309	34,204	32,968	5,145	82,627	37%
TOTAL	4,700,000	22,194	102,842	303,317	11,191	439,544	9%

Sources: UNDP Atlas Financial Reports (CDRs) and information collected from the Project Team.

¹¹ Figures for 2018 include only January and February 2018 expenditures.



98. These financial figures indicate a low disbursement so far; 9% of the GEF grant versus an elapsed time of 69% (33 months out of 48). This is low but also in line with what happened with the implementation of the project as discussed in section 4.2.1. Due to delays, the project lost about a year with two tenders that were cancelled and re-advertised. Since, the project is still in the assessment phase, no expenditures have been expended on the second component that is to finance the clean-up/treatment/disposal /containment of the Nubarashen burial site. The entire GEF grant budget of this second component is USD 3.39M, representing about 72% of the entire GEF grant.

99. Regarding the project management expenditures they represent so far over 19% of the total amount expended (USD 82,627) and over 36% of the entire budget for this component. The Evaluator noted that, in line with the slow progress of the project, project management expenditures were also kept to a minimum.

100. Nevertheless, due to an overall prudent approach to engage project expenditures in line with the implementation of activities, the good news is that with USD 4.26M (about 91%) available, there is a lot of funds left to complete the project, including the full budget planned for the clean-up phase. As discussed earlier in this report, the project is at a cross-road. It has accumulated lots of information necessary to launch the clean-up phase and the budget is available to support this phase. However, three bottlenecks need to be resolved for the project to go forward and obviously when considering the timeline, the project needs a time extension.

Co-financing

101. Co-financing commitments at the outset of the project totaled the amount of USD 19,284,384 (*see table below*), which represented about 80% of the total amount of the financial resources required in the project document of USD 23,984,384 (GEF grant + co-financing) for the implementation of the project.

Table 9: Co-financing Commitments

Partner	Type	Commitments (USD)
Government of Armenia	Cash & In-kind	16,020,000
UNDP	Cash	200,000
Czech-UNDP Trust Fund	Cash	60,000
Private sector	In-kind	2,640,000
OSCE	Cash & In-kind	364,384
Total (USD)		19,284,384

Source: Project Document

102. A large amount of this co-financing (83%) was to come from the government of Armenia as cash and in-kind contributions, UNDP was to provide 1.5%. The rest was to come from the Czech Trust Fund, private sector and OSCE. All these commitments were supported by official letters, which were attached to the project document submitted to GEF.

103. As of the end of February 2018, UNDP has contributed over USD 104k of cash to the project and the Czech-UNDP trust fund grant of USD 60k was used to conduct a detailed field inventory and testing at the

Nubarashen burial site as well as some capacity development activities used during the PPG phase for the development of this project. Regarding the contribution from OSCE estimated at USD 364,384, it was part of a project titled “*Feasibility Study for the Nubarashen Toxic Burial Site*” comprising the assessment and feasibility study of the persistent organic pollutants (POP) and obsolete pesticides burial site in Nubarashen, purchase of a specialized equipment and the remuneration of experts. It was conducted during the PPG phase of this project.

104. Regarding the contribution from the government, no reporting on co-financing has been made so far and no cash contribution were made, mostly in-kind contributions with the participation of government agencies. So far, the lack of cash co-financing has not hampered the project. As discussed in 4.2.1, the project implementation has been slow but due to two tender processes that were cancelled and re-issued. However, cash co-financing will be needed when proceeding with the construction of the hazardous material temporary storage site and the clean-up phase of the Nubarashen burial site.

105. Co-financing was a topic much discussed during the mission of the Evaluator in Armenia for this MTR. Interviews conducted during this mission with government representatives, including from the Ministry of Finance, indicate that the chance of getting cash co-financing from the national budget and for the coming 1-2 years is slimmed. When considering the budgetary process (the MTEF is a three-year cycle), it was said that the prospects of getting these kind of incremental money included in the state budget was low, given other priorities and in the absence of some top down policy directive. It was said that for the coming 1-2 years, the project should rely mostly on the operational budgets of the ministries (MNP and MES) and municipalities involved in the clean-up.

106. However, the review of the co-financing in the project document indicates that some “critical” tasks are to be funded by other sources of funding (i.e. not by the GEF grant). These tasks are part of the sequence of tasks to be implemented; they need to be implemented before other tasks can also be implemented. It is the case for instance with the construction of the temporary storage site which was budgeted at USD 3.36M, including USD 3.09 being co-financed. This storage site before any excavation can take place in Nubarashen.

107. In the meantime, the project document is relatively specific as to which funds will finance what. In addition to the traditional identification of co-financing at the outcome level, the document contains table 10 titled “*Elaborated project design framework and cost estimate by Outcome, Output and Activity*” (see Annex 9) that is in section V Strategy and Project Design. This table lists clearly the funding sources for each main activities (28). A summary is presented in the table below:

Table 10: Project Financing Details

108. This table indicates a high level of co-financing for most expected outputs, including the financing of 100% of activities to be implemented to achieve the expected Outcome 1.3. Under Outcome 2.1, the disposing of Category 1 hazardous material is to be mostly funded by the GEF grant. However, the treatment of Category 2 material is to be funded at 78% by other sources. From this table it is also noted that the packaging, removal, destruction and clean-up of obsolete pesticide stocks and storehouses are to be funded at 100% by other sources.

109. In conclusion, the project has still a large portion of its GEF grant to be disbursed; with a time extension, it has the GEF financial resources to complete the project. However, the project was also designed with large co-financing commitments, including cash and in-kind contributions from the government of over USD 16M. As it stands currently, some of this co-financing is needed to be able to complete the project. Some activities were planned to be funded up to 100% by other than GEF grant sources

Output	GEF Grant		Other Sources		Total USD
	USD	%	USD	%	
Outcome 1.1	470,000	13%	3,168,200	87%	3,638,200
Outcome 1.2	275,000	8%	3,085,000	92%	3,360,000
Outcome 1.3	-	0%	875,000	100%	875,000
Outcome 2.1	1,800,000	97%	50,000	3%	1,850,000
Outcome 2.2	1,590,000	22%	5,550,000	78%	7,140,000
Outcome 3.1	75,000	9%	759,384	91%	834,384
Outcome 3.2	100,000	3%	2,830,000	97%	2,930,000
Outcome 3.3	65,000	3%	1,796,800	97%	1,861,800
Outcome 4.1	100,000	43%	130,000	57%	230,000
Project Management	225,000	18%	1,040,000	82%	1,265,000
TOTAL	4,700,000	20%	19,284,384	80%	23,984,384

and, since there are part of a sequence of tasks to be completed, they need to be implemented for the project to proceed with its implementation.

4.3.5. Project-level Monitoring and Evaluation Systems

110. An adequate M&E plan was developed during the formulation of the project in accordance with standard UNDP and GEF procedures. A total indicative cost of USD 100,000 was identified for M&E activities, representing about 2.1% of the GEF grant. No changes were made during the inception phase. This plan listed monitoring and evaluation activities that were to be implemented during the lifetime of the project, including a mid-term evaluation and a final evaluation. For each M&E activity, the responsible party(ies) was/were identified, as well as a budget and schedule. The M&E plan also includes a set of performance monitoring indicators along with their corresponding targets and means of verification. A summary of the operating modalities of the M&E plan are as follows:

- Performance indicators: A set of 32 indicators with their respective baselines and targets at the end of the project were identified and documented in the *Project Results Framework*.
- Inception workshop: It was conducted on December 4, 2015 in Yerevan. The project design was explained in detail, as well as the results and resources framework. Discussions were facilitated on roles and responsibilities of the implementing partners/stakeholders and the Project Implementation Team and the first year work plan was reviewed. No changes were made to the project design as documented in the project document; an inception report was written to document the inception phase and provide an updated status on the implementation of the project.
- Quarterly Progress Reports: Quarterly progress were planned to monitor the progress and record it in the UNDP Enhanced Results Based Management Platform. Risks are also reviewed quarterly and updated in the Atlas system when needed.
- Annual Project Review/Project Implementation Review (APR/PIR): These annual progress reports, combining both UNDP and GEF annual reporting requirements, are submitted by the Project Manager to the PMB, using the UNDP standards for project progress reporting, including a summary of results achieved against the overall targets identified in the project document. They follow the GEF annual cycle of July 1st to June 30th.
- Periodic Monitoring through Site Visits: UNDP Country Office and the UNDP Regional Coordination Unit (RCU) have conducted visits to project sites to assess first hand project progress. Field Visit Reports (Back To Office Report) were prepared and circulated to the Project Team.
- External mid-term and final evaluations: The mid-term evaluation (MTR) is underway (this report); a final evaluation will take place three months prior to the final PMB meeting and will follow UNDP and GEF evaluation guidelines.
- Project Terminal Report: This comprehensive report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of project's results.
- Learning and Knowledge Sharing: Results from the project are to be disseminated within and beyond the project intervention zone through existing information sharing networks and forums. The project is due to identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation through lessons learned. The project is to identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects. A two-way flow of information between this project and other projects with a similar focus is also encouraged.
- Communications and visibility requirements: Full compliance is required with UNDP's Branding Guidelines and the GEF's Communication and Visibility Guidelines, including the use of the UNDP and GEF logos. For other agencies and project partners that provide support through co-financing, their branding policies and requirements should be similarly applied.
- Audits: Audits are conducted in accordance with UNDP Financial Regulations and Rules and applicable audit policies on UNDP projects.

111. The set of indicators presented in the *Project Results Framework* was reviewed during this MTR. It includes a set of 32 indicators – each one with a baseline and a target by the end of the project - to monitor the

performance of the project at the objective and outcome level. The list of indicators and targets is presented in the table below:

Table 11: List of Performance Indicators

Project Outcomes	Indicators	Targets
Objective - Protection of health and environment through elimination of obsolete pesticide stockpiles and addressing contaminated sites within a sound chemicals management strategy.	1. Obsolete Pesticide stockpiles including POPs Pesticides and wastes are securely packaged, contained and stored pending elimination	<ul style="list-style-type: none"> Removal and export of Pure obsolete pesticides and highly contaminated POPs waste for environmentally sound destruction 12,700 of POPs contaminated soil securely from the Nubarashen site and OP storage sites permanently contained and monitored at the restored and stabilized Nubarashen site. 7,100 of treated Category 2 POPs waste contained at the Nubarashen site.
	2. Major stockpiles of Obsolete Pesticides and POPs pesticide wastes have been destroyed in an environmental sound manner	<ul style="list-style-type: none"> 1,050 t of pure obsolete pesticides and highly contaminated POPs waste exported and destroyed. 7,100 t of POPs waste in the form of heavily contaminated soil treated/remediated
	3. National legal instruments and regulatory framework for hazardous waste and contaminated sites update with gaps filled, conflicts resolved and consistent with relevant international requirements.	<ul style="list-style-type: none"> Fully updated regulatory framework for hazardous and chemicals waste management implemented
	4. Core national technical capacity in place relative to hazardous waste management, risk assessment and contaminated site management	<ul style="list-style-type: none"> Environmental and health risk assessment methodologies documented, disseminated and implemented as part of the national regulatory assessment process for contaminated sites. Professional in regulatory agencies, academia, NGOs and environmental service providers trained on their application
Component 1 - Capture and Containment of Obsolete Pesticide Stockpiles and Wastes.		
Outcome 1.1: Removal of priority POPs pesticide waste from the Nubarashen burial site, secure containment of residual contamination on-site, site stabilization and restoration, with the site secured under appropriate institutional arrangements providing effective access limitations, monitoring and future land use control, all endorsed by an informed public.	5. Detailed site assessment, design documentation, tender specification, implementation procedures including EHS procedures, EIA and required approvals in place to initiate Nubarashen burial site works	<ul style="list-style-type: none"> Implementation of design, operational procedures and conformance with approval conditions verified
	6. Removal of pure pesticides/high concentration POPs wastes (Category 1) and soil highly contaminated with POPs pesticides (Category 2) from the Nubarashen burial site to secure storage	<ul style="list-style-type: none"> Removal to secure storage of 7,000 t of POPs pesticide waste in the form of highly contaminated soil (Category 2) from the Nubarashen burial site.
	7. Onsite secure containment of 12,000 t of low and moderately contaminated soil (Category 3) in an engineered landfill within the Nubarashen site in place	<ul style="list-style-type: none"> Onsite secure permanent containment of 12,000 t of low and moderately contaminated soil in an engineered landfill within the Nubarashen site in place
	8. Restoration, monitoring and access control provisions for the	<ul style="list-style-type: none"> Site fully restored with sustainable phytoremediation vegetation,

Project Outcomes	Indicators	Targets
	Nubarashen burial site are in place and civil works to stabilize the surrounding land and drainage are completed.	<p>appropriately fenced and gated with signage including a 100m buffer zone around the former burial site.</p> <ul style="list-style-type: none"> • The site drainage system upgraded and functional inclusive of a monitored phytoremediation reed bed downstream pond. • Permanent measures to maintain land stability upstream and downstream of site including removal of perched water table and upstream ponds. • Long term monitoring program in place and funded by national budgets. • Institutional arrangements respecting long term land use of the site and surrounding territory involving its administration as part of the adjoining ecological reserve.
	9. Availability of trained capability in the practical management of hazardous chemicals wastes and contaminated site clean up	<ul style="list-style-type: none"> • Sustainable operational capability in the public and private sector for hazardous chemical waste management and contaminated site clean-up in place
	10. High level of public awareness, engagement and support for the clean- up activities and ongoing custody and monitoring arrangements for the Nubarashen burial site supported by appropriate awareness products.	<ul style="list-style-type: none"> • 2 public consultation events held and 5 public documents/web/media products delivered • Survey indicating the views of affected public stakeholders upon completion
Outcome 1.2: Development of the Kotayk national hazardous waste management site at equipped with secure storage and basic infrastructure to allow introduction of HW treatment soil remediation technologies constructed and operated for the secure storage of POPs pesticide waste and OP stockpiles, and the treatment of POPs pesticide contaminated soil.	11. Detailed design documentation, tender specification, implementation procedures including EHS procedures, EIA and required approvals in place to initiate development of the Kotayk HW facility site	<ul style="list-style-type: none"> • Implementation of design, operational procedures and conformance with approval conditions verified
	12. Kotayk national HW management site developed to and operated to international standards	<ul style="list-style-type: none"> • Kotayk national HW management site utilized for general HW management activities on a sustainable basis.
	13. Successful operation of the facility for the storage of Category 1 POPs pesticide waste and OP stockpiles pending export for environmentally sound destruction.	<ul style="list-style-type: none"> • Secure receiving and storage of any contingency volumes of Category 1 pesticide waste and OP stockpiles from Nubarashen and OP stockpile site remediation operations. • Handling and export shipment of any contingency volumes of Category 1 pesticide waste and OP stockpiles from Nubarashen and OP stockpile site remediation operations for environmentally sound destruction.
	14. Successful operation of the facility to host treatment/remediation technology treating for soil highly	<ul style="list-style-type: none"> • Secure storage of approximately 100 t amount of additional soil highly contaminated with POPs

Project Outcomes	Indicators	Targets
	contaminated with POPs pesticide in an environmentally sound manner.	pesticide) from OP storehouse cleanup activities. <ul style="list-style-type: none"> Treatment and remediation of at least 7,100 t of Category 2 material from Nubarashen and OP storage site clean-ups or alternatively export of this material to suitable treatment and remediation facilities elsewhere.
	15. Availability of trained and equipped staff for the practical operation of the Kotayk HW management facility including safeguards and EHS practices	<ul style="list-style-type: none"> Sustainable operational capability for hazardous chemical waste management facility in place
	16. High level of public awareness, engagement and support for the Kotayk HW facility site activities and ongoing operations supported by the delivery of appropriate awareness products and activities delivered.	<ul style="list-style-type: none"> 2 public consultation events held and 5 public documents/web/media products delivered
Outcome 1.3: Remaining significant historical OP storehouses have OP stocks packaged and removed and residual site contamination cleaned up.	17. Screening assessments completed/documentated on identified historical OP storehouse stockpile sites and OP stockpiles and clean up residuals packaged and removed to the Kotayk HW facility.	<ul style="list-style-type: none"> Under MOA supervision all former OP stores are maintained in other productive uses
	18. Detailed contaminated site and risk assessments and remediation/clean up designs on identified priority sites completed/documentated	<ul style="list-style-type: none"> Detailed contaminated site and risk assessments and remediation/clean up designs on identified on up to 6 priority sites completed/documentated
	19. Excavation/removal, remediation and/or containment on identified priority sites completed.	<ul style="list-style-type: none"> Excavation/removal, remediation and/or containment of 200 t of contaminated soil from up to 6 identified priority sites completed
	20. Public consultation events held at 6 priority sites and public acceptance of actions are obtained	<ul style="list-style-type: none"> 6 public consultation events held at 6 priority sites
Component 2 – Obsolete Pesticide Stockpile and Waste Elimination.		
Outcome 2.1: Removal from Armenia of all substantially all high priority POPs pesticides, associate very high concentration wastes and OP stockpiles.	21. Destruction of Category 1 POPs pesticide wastes from Nubarashen and OP stockpiles in an environmentally sound destruction in accordance with the SC Article 6, Basel Convention and GEF guidance performance requirements.	<ul style="list-style-type: none"> Shipment and environmental sound destruction of any contingency volumes of Category 1 pesticide waste and OP stockpiles from Nubarashen and OP stockpile site remediation operations at qualified competitive export destruction facility.
Outcome 2.2: Environmentally sound remediation of heavily POPs pesticide contaminated soil inclusive of destruction of extracted POPs pesticides demonstrated.	22. Treatment/remediation of Category 2 heavily contaminated POPs contaminated soil (POPs pesticide waste) remediated to levels below the low POPs content and demonstration of its commercially viability in Armenia for remediation of POPs contaminated soil	<ul style="list-style-type: none"> Shipment and environmental sound destruction of 7,100 t of Category 2 heavily contaminated POPs contaminated soil (POPs pesticide waste) remediated to levels below the low POPs content at the Kotayk site and returned/contained on the Nubarashen site, or exported to a qualified facility.
	23. Operational training of national technical personal and service	<ul style="list-style-type: none"> 20 national technical personal operationally qualified and

Project Outcomes	Indicators	Targets
	providers on a modern contaminated soil treatment/remediation technology	<p>experienced on a modern contaminated soil treatment/remediation technology.</p> <ul style="list-style-type: none"> Commercial service provider capability available for other contaminated soil treatment/remediation projects in Armenia.
Component 3 – Institutional and Regulatory Capacity Strengthening for Sound Chemicals Management and Contaminated Sites.		
Outcome 3.1: Legal/regulatory and technical guidance tools for management of chemical wastes, including POPs, and, contaminated sites management within a national sound chemicals management framework strengthened.	24. Policies, legislation and regulatory measures respecting hazardous chemical wastes and contaminated sites management reviewed, updated and appropriate revisions implemented	<ul style="list-style-type: none"> (List of specific legislative and regulatory measures to be provided by MNP/UNDP CO)
	25. Adopted technical guidelines on operational and EHS procedures for hazardous chemicals waste handling, transport, storage and disposal, developed in accordance with international practice and relevant national personnel trained	<ul style="list-style-type: none"> Adopted guidance materials operational and EHS procedures for hazardous chemicals waste handling, transport, storage and disposal consistent with international practice implemented. National training program delivered to at least 50 relevant technical personnel in regulatory and private sector service provider positions who would attain relevant certification.
	26. Guidance documentation on environmental and health risk assessment methodologies and practices applicable to hazardous waste stockpiles and contaminated sites developed in accordance with international practice introduced and adopted, and relevant national professional trained.	<ul style="list-style-type: none"> Adopted guidance materials on environmental and health risk assessment methodologies and practices applicable to hazardous waste stockpiles and contaminated sites developed in accordance with international practice implemented. Training of at least 50 professionals from regulatory authorities, academia, NGOs and environmental service providers
Outcome 3.2: Technical/Environmental performance evaluation and upgrading requirements for existing national destruction capacity.	27. The Eco-Project incineration facility is fully qualified based on international standards for management of HW and chemical wastes.	<ul style="list-style-type: none"> Full test burn program completed and licensing decisions made on an expanded menu of HW made. A technical assessment and upgrading investment plan is completed for purposes of improving facility efficiency and environmental performance including potential application to chlorinated waste streams.
Outcome 3.3: Basic national capacity for effective hazardous chemicals sampling and analysis for multi-environmental media and contaminated sites in place, operational and certified to international standards.	28. Adopted national strategy for rationalization and upgrading national laboratory capability to serve a sound chemicals management framework including hazardous waste and contaminated sites management.	<ul style="list-style-type: none"> National strategy implemented as reflected by availability of effective support capability for sound chemicals management particular hazardous waste management and contaminated sites.
	29. Designated national laboratories, including one each in the regulatory, academic and private sector upgraded with suitable capability for hazardous chemical	<ul style="list-style-type: none"> Three designated laboratories upgraded and operational. Long term national budget commitments and/or business

Project Outcomes	Indicators	Targets
	waste and contaminated site sampling and analysis	plans in place ensuring sustainable operation
	30. Training program for laboratory and associated personal delivered.	• 15 additional key laboratory personal from designated laboratories trained
	31. Designated national laboratories with international certification and international methods and practice in place	• 3 designated laboratories achieved full international certification
Component 4 – Monitoring, learning, adaptive feedback, outreach, and evaluation.		
• Outcome 4.1: Monitoring, learning, adaptive feedback, outreach, and evaluation.	32. M&E and adaptive management applied to project in response to needs, mid-term evaluation findings with lessons learned extracted.	• Final evaluation report ready in the end of project

Source: Project Document and PIRs

112. This set of 32 indicators and their respective targets (48) did not change since the formulation of the project. These indicators have been used yearly to report progress made in the APRs/PIRs. The Evaluator also noted that the M&E function was “embedded” in the project strategy as a component with a budget of USD 100k allocated to this function. The set of indicators includes 4 indicators to monitor the project at the objective level: the first two indicators focus on the “clean-up phase” as well as the disposal of obsolete pesticides; another one is to monitor the progress made in strengthening the legal instruments and regulatory framework for chemical management; finally the fourth indicator is about capacities related to the management of hazardous wastes.

113. The rest of the indicators (28) monitor the progress made by the nine outcomes. These indicators are for the most part SMART¹² indicators that is there are specific, easily measurable, attainable, relevant and time-bound to measure progress toward achieving the expected outcomes and the objective of the project. However, there are too many indicators to track and report against. It renders the monitoring function time consuming for little value added to the overall monitoring process. Some of these indicators could be streamlined and reduced to a more manageable number of indicators. An optimum number of indicators to monitor a GEF funded project is around 15 with 20 being a maximum number of indicators.

114. One element that may have led to this large number of indicators is the way the project has been structured. As it stands in the project document, the project is divided into three components, then 9 outcomes and 34 outputs (see Section 4.1.2). According to GEF project monitoring guidelines, monitoring and reporting is done at the outcome level. One of the main sections in the annual progress reports (PIRs) is the section reporting on progress made toward its objective/outcomes. With 9 outcomes to monitor it is somewhat logical to end up with a total of 32 indicators. However, with a streamlined structure to identify one outcome per component and then 9 outputs below these three outcomes would have provided a project structure that would have necessitated fewer indicators in order to measure the progress made by the project.

115. One result of this complex monitoring framework is to use too much valuable time from the project implementation team to report on progress made. It prevents the team to spent this time on more productive tasks to implement the project. Additionally, the review of the PIRs indicates that due to the numerous indicators, there are some redundancies in the reporting, which, again, would be limited with fewer indicators. For example, indicators #11, 12, 13 and 14 presented in table 11 above, could be collapsed into one indicator such as “An operating national HW management site capable of securely storing categories 1 and 2 POPs chemicals”. From a Results-Based Management (RBM) point of view, the ultimate expected result is an operational hazardous waste management waste; the rest are intermediary results, which still need to be monitored but not at this level; intermediary results are monitored through the day-to-day management of the project and documented when reporting against annual work plans.

¹² SMART: Specific, Measurable, Attainable, Relevant and Time-bound.

116. Based on this review of the M&E function of the project, it is rated as *moderately satisfactory*. There are too many indicators to monitor the progress made by the project. One result is to produce long progress reports; the PIR-2017 contains 34 pages to report on progress made toward the objective and outcomes. These reports are not reader-friendly and do not present clearly and concisely the progress made to “*eliminate obsolete pesticide stockpiles and addressing contaminated sites within a sound chemicals management strategy*”. It is recommended to review these indicators and their respective targets and come up with fewer indicators and targets to monitor the project.

4.3.6. Reporting

117. Management reports have been produced according to UNDP project management guidelines. They include AWP that when finalized are endorsed by the PMB; quarterly progress reports; and annual APRs/PIRs. The Evaluator was able to collect the 2015-16, the 2017 and the 2018 AWP, the annual reports and APRs/PIRs for 2015, 2016, and 2017. Overall, progress made by the project is being satisfactorily reported, following UNDP project progress reporting guidelines. The APRs/PIRs document the progress made against the project objective, outcomes and outputs on a yearly basis using the set of indicators and targets reviewed in the previous section. These annual reports also include a review and update of the risks identified at the outset of the project and the steps taken to mitigate these risks when rated as critical.

118. The ratings given in APRs/PIRs were also reviewed. The progress made toward the overall development objective and outcomes and the progress made in project implementation have been rated both as satisfactory in the 2016 and 2017 APRs/PIRs. The Evaluator found that these ratings were not well justified when considering the progress made so far (*see Section 4.2.1*). Given that after 33 months of implementation – representing 69% of the elapsed time – only 9.4% of the budget has been expended, it is difficult to justify a satisfactory rating. The fact that no activities have taken place yet under the second component after 33 months is a strong indication that the project has been facing critical implementation issues. On this basis, it is difficult to justify a satisfactory rating for the implementation and the progress made toward the project objective.

4.3.7. Communications – Knowledge Sharing

119. Communication is “embedded” in the project design (Project Results Framework) under the fourth component. The description of component 4 includes the “*dissemination of lessons learnt domestically and internationally*”. Part of the M&E plan, the project is to “learn and share knowledge” beyond the intervention zone through existing information sharing networks and forums, and exchanging with other similar projects.

120. So far, due to delays to recruit firms and conduct the required assessments, not much information has been available to disseminate. However, as the project is now getting this information, particularly the assessment of the Nubarashen burial site and the design for the clean-up work needed to be undertaken, valuable information is now being accumulated by the project and could be disseminated/shared.

121. Additionally, interviews conducted for this MTR indicate that there is a need for more communication among Stakeholders; particularly to develop a more unified vision on what the project should do among key stakeholders such as PMB members and members of the technical advisory committee. The Evaluator found striking differences among stakeholders interviewed for this MTR. As the project is now at a cross-road to undertake its critical phase of clean-up/treatment/disposal/containment, it is important that a more common vision on what to do be developed and communicated among stakeholders. At this point in the implementation, more efforts are needed to communicate the accumulated knowledge but also the options to move forward; particularly targeting key stakeholders who also will play a critical role in identifying the necessary co-financing. It is recommended that during the remaining period of implementation, the project implementation team coordinate an electronic monthly bulletin to be sent to all stakeholders and beneficiaries to give updates but also knowledge on chemical management.

4.4. Sustainability

122. This section discusses how sustainable project achievements should be over the long-term. It includes a review of the management of risks and specific risks such as financial risk, socio-economic risks, institutional framework and governance risks, and environmental risks.

123. The project document does not really address the concept of sustainability of results per se. Instead, it focuses on the potential replicability of the approach used by the project in Armenia and elsewhere. The project document details a number of features of the project that may serve as examples to be replicated; they include:

- Applying an approach to POPs stockpiles, waste and contaminated site elimination based on prioritizing the cost effectiveness, risk mitigation, and global environmental benefit as a primary criteria in incrementally capturing, securing and ultimately eliminating the POPs waste and associated risk.
- Ensuring an appropriate mix of developing national capability and utilizing established, international capability to obtain the most cost effective, sustainable and practically achievable results.
- Exploiting and building on national capability and capacity to provide a sustainable expertise core and physical capability in critical areas such as risk assessment, hazardous waste management practices, contaminated site assessment/containment/monitoring, and development of optimized analytical support capability.
- Integrating proactive public consultation and awareness activities into the planning and implementation of sensitive hazardous waste and contaminated sites projects inclusive of a prominent role taken by civil society organizations.

124. The Evaluator confirms that these features, once they will be tested and the project be completed, will have the potential for replicability. They will be critical tested features that can contribute to improving the effectiveness of future similar projects. These features will need to be documented properly and disseminated through related networks. The implementation of this type of projects carry high risks and the more access to best practices and lessons learned the better.

125. The sustainability of project achievements is also much dependent on the management of risks linked to the implementation of this project. Project risks were identified at the formulation stage and documented in the project document; including the risk mitigation strategy for each identified risk. The project implementation team has been monitoring these risks. No risks have been reported as critical in the annual APRs/PIRs 2016 and the overall risk was rated as low. In the PIR 2017, the overall risk was rated as high and the section on critical risk management discusses three specific risks. The table below lists the risks as well as their respective management responses, which were identified at the formulation stage and reviewed during the inception phase.

Table 12: List of Risks and Mitigation Measures Identified at the Formulation and Inception Phase

Project Risks	Rating	Mitigation Measures
1. Lack of institutional cooperation between key stakeholders, particularly Ministry of Nature Protection, Ministry of Emergency Situations, Ministry of Agriculture and ministry of Health	Low	<ul style="list-style-type: none"> • The project's preparation and implementation arrangements build upon the long positive working relationship between these key institutional stakeholders is addressing the POPs and OP issue in the country through a formally constituted Inter-Agency Committee. Additionally, a clear understanding and agreement exists respecting each institution's roles and responsibilities for various aspects of the project during implementation. The Project Board is a continuation of the above IAC mechanism with representation at a senior level from each will proactively ensure the resolution of operational issues as they appear.
2. Failure of the current framework for hazardous and chemicals waste to adequately and efficiently cover project activities and requirements	Low	<ul style="list-style-type: none"> • In the PPG stage, it has been recognized that there are gaps in the present framework and this is the focus of specific key TA initiatives in Component 3 particularly in areas where requirements applicable to the handling, transportation, storage, treatment and disposal of HW are involved. For its part the project has adopted referenced international standards and guidelines in these areas. This will serve to pilot and inform national regulatory authorities in these areas through project implementation with the results that tested approaches applied by well-informed regulators and operators will develop.
3. Inability to export pure POPs pesticides and OPs	Moderate	<ul style="list-style-type: none"> • As detailed in Section V above, the option to not exporting selected waste streams and retaining it in secure storage is provided for as a default option recognizing this substantially removes immediate and critical risks they

Project Risks	Rating	Mitigation Measures
		currently pose and allow development of regional options that will likely become available in the medium term.
4. Inability to provide for cost effective treatment of highly contaminated soil (Category 2 materials) in an environmental sound manner.	Moderate	<ul style="list-style-type: none"> The stepwise process of tendering and having pilot out of country demonstration of capability of candidate technologies ensures that technical and environmental performance requirements to remediate soil below the SC low POPs content will be determined prior to large scale commitment of resources. A fall back is available for treatment in export facilities subject to the above. In the event this is unachievable the default option of secure containment will be exercised.
5. Environmental damage resulting from delay or non-completion of Nubarashen site clean-up, stabilization residual containment and restoration	High	<ul style="list-style-type: none"> The step by step process that restricts excavation and removal and provides for interim containment of contaminated material mitigates operation period impacts. The further constraint of not starting a specific step in the process until resources to complete it is provided had been imposed.
6. Notwithstanding the strong government co-financing commitment, circumstances could develop (e.g. emerging political conflict: economic difficulties and shift of national priorities) at some point that sufficient direct cash funding is either not available or available beyond the timeline to complete the planned co-funded activities.	Moderate	<ul style="list-style-type: none"> Enlarge strategic partnership with third parties (international organizations, donors and IFIs) to mobilize additional co-financing resources for implementation of committed project activities. Certain activities planned with direct cash funding are performed through local in-kind contributions (e.g. participation in the Kotayk facility renovation by the MES, development of supporting infrastructure at Nubarashen site by Yerevan Municipality, etc.). Statements of Intent are signed between UNDP and respective parties fixing their specific commitments. Follow-up discussions with the Government on mobilization of possible co-financing alternatives. <p><i>Identified during the inception phase</i></p>
7. The envisaged MOA/EU/FAO co-financing (800,000 US dollars) of Activity 1.3 (the planned collection and packaging of the 150t OPs waste) might not be available or be available beyond the planned timeline.	High	<ul style="list-style-type: none"> Follow up/intensify discussions with the MOA on possible recommencement of the postponed fundraising process with EU/FAO for co-financing of Activity 1.3. To activate negotiations with the RA Government to reconsider and reassess the MOA's commitments, additionally involve MES and respective communities, as well as private owners in collection and packaging of OP POPs from major storehouses in Armenia regions. <p><i>Identified during the inception phase</i></p>

Source: Project Document (Annex C), Project Inception Report and PIRs.

126. At first, the review of the risks identified during the formulation of the project and their respective mitigation indicated a total of five risks presented in Annex C of the project document. These five risks were reviewed during the inception phase and 2 additional risks were added (also added in the table above) for a total of 7 risks at the outset of the project.

127. However, when furthering the review of how these risks were to be managed, the approach presented in the project document under the section “*Project Design Options and Risk Management*” is different, rendering the function of managing risks somewhat convoluted. This section does not refer at all to the list of risks presented in Annex C, and the connection between the discussion in this section and Annex C is not easy. It is not obvious what is the final set of risks to be monitored since this section is also listing risks linked with the implementation of this project that are presented in 2 categories:

(i) *the principle technical, financial, and direct environmental risks*

- The high concentration POPs pesticides and wastes (Category 1 material) could not be exported immediately due to political barriers in transit countries or insufficient resources.
- The high concentration POPs contaminated soil (Category 2 materials) could not be economically treated to a sufficiently low concentration, or otherwise be exported for

treatment.

- c) Notwithstanding the strong government co-financing commitment, circumstances could develop at some point that sufficient direct cash funding was not available to complete either/or Component 1 and 2, particularly considering environmental risks associated with not being able to complete on-site work such that there would be increased potential for POPs pesticide release.
- (ii) *the general environmental, social and related institutional risks*
 - d) Inadequate environmental protection measures are not built into the detailed design and/or actually implemented for the various activities involved with the excavation, handling, packaging, transport, storage and treatment/destruction of OPs and POPs waste such that unacceptable releases to the environment and exposure of those directly involved and potentially a broader public occur.
 - e) In sufficient consideration of possible social impacts inclusive of inadequate public consultation and input results in significant unanticipated and/or unaddressed social impacts from project activities and the absence of public acceptance of project actions, which may negatively affect sustained political and institutional support for key project activities (i.e. clean-up activities at Nubarashen, development of the Kotayk site and ability to transport POPs wastes.

128. Finally, in the PIR-2017, three risks are discussed in Section E Critical Risk Management. Two risks seem to be from the list in the table above, but the third one is a new risk “*Measures or mechanisms in place are not sufficient to respond to local community grievances.*”

129. The review of the list of 7 risks presented on the table above indicates an adequate list of risks for this project, though they do not seem to be as critical as those identified in the risk section of the project document and presented above. When considering the status of the project today it is obvious that the latter list of five risks in 2 categories (a) to e)) is much more appropriate. Today the critical risks include the non-availability of co-financing (risk c); difficulties to export Category 1 material (risk a); issue to identify a hazardous waste temporary storage site (risk e); difficulties to treat Category 2 material (risk b); and the risk of release to the environment and human exposure, including difficulties to contain the site after excavation (risk d). It is recommended to review the list of risks and that a final list of risks be consolidated from all the risks listed above in this section, including the good analysis to mitigate the risks a) to e) detailed in the section on risk management.

4.4.1. Financial risk to Sustainability

130. Financial risk is an area where critical questions need some discussions. As discussed in other sections of this report, the project was built on the assumption of a GEF grant of USD 4.7M but also on other funding sources – confirmed by letters - totaling over USD 19M, including USD 16M to be provided in cash and in-kind by the government. Furthermore, as discussed in section 4.3.4, some of the government co-financing commitments are critical for the implementation of some activities. For instance, activities planned under Outcome 1.3 (obsolete pesticides storehouses clean-up) is to be financed 100% by other sources (i.e. not by the GEF grant). The treatment of Category 2 material (Outcome 2.2) is to be funded at 78% by other sources. Etc. It would be ideal if all the financing planned to implement this project be available. However, the reality is quite different and at the time of this MTR we still do not know how much co-financing is available if any.

131. Without co-financing (other sources of funding) the project cannot be implemented as planned. This financial risk was reviewed by the design team. They proposed to mitigate this financial risk by a step-by-step process through sequencing activities to be implemented: *first* to excavate, package, remove and securely store or securely contain restored contaminated material from the Nubarashen burial site; and *second* to coordinate the sequencing of activities to treat and dispose of Category 1 and 2 materials. The first step by recovering and securely storing Category 1 and 2 from the Nubarashen site would remove the primary risk posed by the site. Then the second step would be to determine if these wastes can be immediately treated/disposed of. If not the option of longer term secure storage would be provided by the storage site constructed.

132. The review of the proposed mitigation measures including some principles is attractive but a high financial risk remains and need to be addressed as soon as possible. Proceeding step by step would only be an

option if the full financing plan is available to fully implement the first step. Identifying some cash co-financing in the coming few months should be the priority number one of the project.

4.4.2. Socio-economic risk to Sustainability

133. As described in the project document, social impact risks associated with this type of projects are considered low. The anticipated social impacts are positive specifically through the removal of POPs and obsolete pesticides stockpile and of contaminated sites where public exposure through itinerant agricultural, recreational and general uncontrolled public access could lead to negative health implications. The latter is particularly true for the Nubarashen burial site where water resources utilized nearby recreational and agricultural communities are threatened by the burial site if left unaddressed. This type of risks will be mitigated by the security of these sites and of the clean-up operations let by MES, a paramilitary organization. The project will also support public consultations to address existing concerns in collaboration with NGOs such as AWHHE. Finally, one measure identified at the design stage was to include the Nubarashen site – once cleaned-up – in the local land use plan and incorporated in the adjacent ecological reserve with immediate public access exclusion. It would prevent the access to the area for occasional grazing and mushroom harvesting apparently practiced periodical by the local population.

4.4.3. Institutional framework and governance risk to Sustainability

134. As discussed in section 4.1.1, the project is a response to a growing priority for the government to address the management issues of chemicals in Armenia. Addressing the Nubarashen burial site issue is now part of the “*Program of the Government of the Republic of Armenia – 2017-2022*”. The project has been supporting capacity development activities to strengthen institutions dealing with the management of chemicals and contaminated sites but also to strengthen the legislation and the regulatory framework in this area. Some of the support provided such as the drafting of the Mayor’s Decree and masterplan issued in 2016 for the use of the Nubarashen site has been institutionalized. Technical recommendations have been provided for POPs/chemicals waste handling, transportation, storage, disposal and management requirements. Training has been provided on several topics related to the management of chemicals. It is anticipated that government agencies will continue to improve its management of chemicals in Armenia in the foreseeable future. Some project achievements are already partially institutionalized and they should be sustained in the medium-term. Overall, once the project will be completed, Armenia should be better equipped for managing its chemicals.

4.4.4. Environmental risk to Sustainability

135. As it is well described in the project document, there are environmental risks when implementing activities that involve the management of hazardous wastes and contaminated sites. The main risks are accidental releases of these wastes in the environment with consequential environmental contamination and human exposure with potential negative health implications. This can occur through poor organization and planning, inadequate/inexperienced design of activities, failure to adhere to environmental performance standards, poorly executed implementation practice, accidents and inadequate emergency response, lack of proponent/regulatory oversight, and inadequate resources and expertise.

136. The review of this risk indicate that a good approach was built into the design of this project to mitigate environmental risks. It is based on several principles; they include:

- *International technical support, oversight, and adoption of international standards:* The project is designed with development objectives associated with creating and strengthening national capacity on the management of hazardous waste and contaminated sites. The use of international expertise will provide the project with international oversight and the transfer of best international standards and practices.
- *Internationally benchmarked EIA requirement:* The Nubarashen burial site and the hazardous waste temporary storage site will be subject to national environmental assessments. These assessments should be benchmarked against a reasonable standard of international practice. They should be conducted by a professional team including qualified internationally consultants that are EIA professionals. These EIAs should be concluded by an Environmental Management Plan (EMP) to serve as a monitoring baseline when monitoring the implementation of activities.

- *Provision for extensive operational training to international standards:* GEF financial resources will be used to conduct training activities. This training will use recognized international guidance documents and at least cover familiarization with the developed EMP, application site specific of environmental health and safety procedures, technical training on key operational activities and adherence to mandatory containment and release mitigation, emergency response procedures, and undertaking worker health monitoring.
- *Inclusion of environmental performance verification as part of the M&E process:* The overall project M&E activity will include an evaluation of adherence to internationally benchmarked environmental practices and performance consistent with UNDP's safeguards policy.

137. Of course, it goes without saying that once the Category 1 and 2 hazardous waste from Nubarashen burial site but also from the obsolete pesticide stockpiles stored in storehouses will be either treated or disposed of, and that the remaining material at the Nubarashen site be contained, the risks attached to these wastes will be eliminated.

Annex 1: Project Expected Results and Planned Activities

The table below was compiled from the list of expected results and planned activities as anticipated in the project document. It is a succinct summary of what is expected from this project.

Project Objective: Protection of health and environment through elimination of obsolete pesticide stockpiles and addressing contaminated sites within a sound chemicals management strategy.

Components	Expected Outcomes	Budget per Outcome	Indicative Activities
Component 1 – Capture and Containment of Obsolete Pesticide Stockpiles and Wastes	Outcome 1.1: Removal of priority POPs pesticide waste from the Nubarashen burial site, secure containment of residual contamination on-site, site stabilization and restoration, with the site secured under appropriate institutional arrangements providing effective access limitations, monitoring and future land use control, all endorsed by an informed public.	GEF: \$745,000 Co-financing: \$7,128,200	<ul style="list-style-type: none"> Detailed design and approvals Preparatory site work Excavation, packaging and removal of Category 1 material Redistribution, segregation and temporary containment of Category 2 and 3 materials Excavation, packaging and removal of Category 2 POPs waste On-Site Containment of Category 3 POPs waste Site restoration and aftercare arrangements Supporting Training Supporting public awareness and consultation
	Outcome 1.2: Development of the Kotayk national hazardous waste management site at equipped with secure storage and basic infrastructure to allow introduction of HW treatment soil remediation technologies constructed and operated for the secure storage of POPs pesticide waste and OP stockpiles, and the treatment of POPs pesticide contaminated soil.		<ul style="list-style-type: none"> Detailed Design and Approvals Kotayk facility development Kotayk facility project operation Supporting training Supporting public awareness and consultation Management of OP Storehouses
	Outcome 1.3: Remaining significant historical OP storehouses have OP stocks packaged and removed and residual site contamination cleaned up.		<ul style="list-style-type: none"> OP storehouse stockpile packaging and basic clean-up Detailed site assessment and clean up design of priority storehouse sites Remediation and/or removal of highly contaminated soil from priority storehouse sites Supporting public consultation
Component 2 – Obsolete Pesticide Stockpile and Waste Elimination	Outcome 2.1: Removal from Armenia of all substantially all high priority POPs pesticides, associate very high concentration wastes and OP stockpiles.	GEF: \$3,390,000 Co-financing: \$5,600,000	<ul style="list-style-type: none"> Export of an estimated 900t of appropriately packaged Category 1 POPs waste from the Kotayk facility to a technically qualified, commercially determined, hazardous waste destruction facility outside of Armenia.

Components	Expected Outcomes	Budget per Outcome	Indicative Activities
	Outcome 2.2: Environmentally sound remediation of heavily POPs pesticide contaminated soil inclusive of destruction of extracted POPs pesticides demonstrated.		<ul style="list-style-type: none"> Treatment or remediation of 7,100t of Category 2 soil.
Component 3 – Institutional and Regulatory Capacity Strengthening for Sound Chemicals Management and Contaminated Sites	Outcome 3.1: Legal/regulatory and technical guidance tools for management of chemical wastes, including POPs, and, contaminated sites management within a national sound chemicals management framework strengthened	GEF: \$240,000 Co-financing: \$5,386,184	<ul style="list-style-type: none"> Updating and revision of policies, legislation and regulations Preparation of technical guidelines for hazardous chemicals and waste management Preparation of environmental and health risk assessment methodologies and practices
	Outcome 3.2: Technical/Environmental performance evaluation and upgrading requirements for existing national destruction capacity		<ul style="list-style-type: none"> Eco-Protect chemical/biological waste incineration facility technical and environmental performance assessment
	Outcome 3.3: Basic national capacity for effective hazardous chemicals sampling and analysis for multi-environmental media and contaminated sites in place, operational and certified to international standards		<ul style="list-style-type: none"> Development and Implementation of a national hazardous chemicals laboratory strategy Upgrading of designated laboratory infrastructure and equipment Delivery of laboratory personnel training Certification of designated laboratories in international standards
Component 4 – Monitoring, learning, adaptive feedback, outreach, and evaluation	Outcome 4.1: Monitoring, learning, adaptive feedback, outreach, and evaluation.	GEF: \$100,000 Co-financing: \$130,000	<ul style="list-style-type: none"> Apply M&E and adaptive management to provide feedback to the project coordination process to capitalize on the project needs Accumulate, summarize and replicate lessons learned and best practices at the country level
Project Management		GEF: \$225,000 + Co-financing: \$1,040,000	
Total Budget		GEF: \$4,700,000 + Co-financing: \$19,284,384 = Total: \$23,984,384	

Source: Project Document and Inception Report

Annex 2: MTR Terms of Reference



UNDP-GEF Project Midterm Review Terms of Reference



Empowered lives.
Resilient nations.
Elimination

**International consultant to conduct Mid-Term Evaluation of UNDP-supported GEF-financed
of obsolete pesticide stockpiles and addressing POPs contaminated sites within a Sound Chemicals
Management Framework in Armenia” full-sized project**

BASIC CONTRACT INFORMATION

Location: Republic of Armenia

Application Deadline: 20 November, 2017

Category: Energy and Environment

Type of Contract: Individual Contract

Assignment Type: International Consultant

Languages Required: English

Starting Date: 5 February, 2018

Duration of Initial 5 February – 15 June, 2018

Contract:

Expected Duration of Assignment: Estimated 22 effective person-days (17 effective person-days home based and 5 effective person-days on field mission to Yerevan, Armenia)

BACKGROUND

A. Project Title

UNDP-supported GEF-financed full-sized project “Elimination of obsolete pesticide stockpiles and addressing POPs contaminated sites within a Sound Chemicals Management Framework in Armenia”.

B. Project Description

This is the Terms of Reference for the UNDP-GEF Midterm Review (MTR) of the full-sized project titled “Elimination of obsolete pesticide stockpiles and addressing POPs contaminated sites within a Sound Chemicals Management Framework in Armenia” (PIMS#4905) implemented by UNDP jointly with the Ministry of Nature Protection and the Ministry of Emergency Situations in partnership with the Ministry of Agriculture of the Republic of Armenia and with the Yerevan Municipality. The project started on May 26, 2015 and entered to the third year of implementation. In line with the UNDP-GEF Guidance on MTRs, this MTR process was initiated before the submission of the third Project Implementation Report (PIR). The MTR process must follow the guidance outlined in the document [Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects](#).

The objective of the project is to protect human health and the environment globally as well as locally through elimination of POPs and obsolete pesticide stockpiles, and addressing associated contaminated sites within a sound chemicals management framework. It will meet this objective by eliminating a large POPs pesticide burial site representing the major POPs stockpile and waste legacy for the country as well as residual obsolete pesticide stores at 24 locations. In total, approximately 7,100 t of POPs waste in the form of heavily contaminated soil, 1,050 t of POPs pesticides and other obsolete pesticides will be recovered, secured and ultimately treated and destroyed in an environmentally sound fashion. A further 12,700 t of less severely POPs contaminated soil will be securely contained. Additionally, the project will provide critically needed hazardous waste infrastructure and national technical capability for the ongoing management of POPs and other chemical hazardous wastes as well as supporting the strengthening of institutional and regulatory capacity within an

overall chemicals management framework.

The project objective will be achieved through the four main components:

Component 1: Capture and Containment of Obsolete Pesticide Stockpiles and Wastes

Component 2: Obsolete Pesticide and POPs Waste Elimination

Component 3: Institutional and Regulatory Capacity Strengthening for Sound Chemicals management and Contaminated Sites

Component 4: Project Monitoring and Evaluation

Activities of the project will contribute to achieving the following Country Programme Outcome as defined in CPAP or CPD: **“Armenia is better able to address key environmental challenges including climate change and natural resource management”**, and to the Applicable Outcome and Output (from UNDP’s 2014-17 Strategic Plan): **Outcome 1: “Growth and development are inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded”**, **Output 1.3. “Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste”**.

The planned end date of the project is 29 April, 2019.

The project runs on allocations of 4,700,000 USD from GEF and additional input of 200,000 USD from UNDP and planned co-financing of 16,020,000 USD as in-kind and cash financing contributions from the Government of the Republic of Armenia.

The Project Management Board is responsible for making consensus based decisions, in particular when guidance is required by the Project Coordinator (PC). The Board will play a critical role in project monitoring and evaluations by assuring the quality of these processes and associated products, and by using evaluations for improving performance, accountability and learning. The Project Management Board includes key national government agencies as followings: Republic of Armenia Government Staff, Ministry of Nature Protection, Ministry of Emergency Situations, Ministry of Foreign Affairs, Yerevan City Municipality, Ministry of Health, Ministry of Agriculture and UNDP Country Office. Project Management Board contains of three distinct roles: Executive, Senior Supplier, Senior Beneficiary roles. The project is implemented by the Ministry of Nature Protection (MNP) following UNDP’s National Implementation Modality (NIM).

MTR APPROACH & METHODOLOGY

C. Scope of Work and Key Tasks

The MTR team will consist of one independent consultant who will conduct the MTR and be supported with an Interpreter (Armenian-English-Armenian).

The MTR must provide evidence based information that is credible, reliable and useful. The MTR consultant 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 Annual Project Review [APR], 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 consultant 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 consultant is expected to follow a collaborative and participatory approach¹³ 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 MTR¹⁴. Stakeholder involvement should include

¹³ For ideas on innovative and participatory Monitoring and Evaluation strategies and techniques, see [UNDP Discussion Paper: Innovations in Monitoring & Evaluating Results](#), 05 Nov 2013.

¹⁴ For ideas on innovative and participatory Monitoring and Evaluation strategies and techniques, see [UNDP Discussion Paper: Innovations in Monitoring & Evaluating Results](#), 05 Nov 2013.

interviews with stakeholders who have project responsibilities, including but not limited to; executing agencies, senior officials and task team/component leaders, key experts and consultants in the subject area, Project Board, project stakeholders, academia, local governments, NGOs and CBOs, etc.

The MTR consultant will first conduct a desk review of the project documents (i.e. PIF, Project Document, AWP, Project Inception Report, Project Implementation Reports [PIRs], Finalized GEF focal area Tracking Tools, Project Board meetings' minutes, Financial and Administration guidelines used by Project Team, project operational guidelines, manuals and systems, etc.) provided by the Project Team and Commissioning Unit. A list of documents that the project team will provide to the evaluator for review is included in Annex A of this Terms of Reference. Then they will participate in an MTR inception workshop to clarify their understanding of the objectives and methods of the MTR, producing the MTR inception report thereafter. The MTR mission will consist of several interviews with local stakeholders and site visits to Nubarashen OPs burial site as well as the site selected for the temporary storage of excavated POPs.

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.

The MTR consultant will assess the following four categories of project progress and produce a draft and final MTR report. See the [*Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects*](#) for requirements on ratings. No overall rating is required.

1. 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 to achieving 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.
- Review how the project addresses country priorities.
- Review decision-making processes.
- 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 were raised in the project design.

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 its time frame?
- Examine if progress so far has 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.
- Ensure broader development and gender aspects of the project are being monitored effectively. Develop and recommend SMART 'development' indicators, including sex-disaggregated indicators and indicators that capture development benefits.

2. Progress Towards Results

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

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

3. Project Implementation and Adaptive Management

Using the *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects*; assess the following categories of project progress:

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?
- Examine the use of the project's results framework/logframe 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? 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?

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, 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 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?)
- 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.

4. Sustainability

Validate whether the risks identified in the Project Document, APR/ 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:

Assess overall risks to sustainability factors of the project in terms of the following four categories:

Financial risks to sustainability:

- 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)?

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? 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 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?

The MTR consultant will include a section in the MTR report setting out the MTR's evidence-based **conclusions**, in light of the findings. A recommendation table should be put in the report's executive summary. The MTR consultant should make no more than 15 recommendations total.

Additionally, the MTR consultant is expected to make recommendations to the Project Team. Recommendations should be succinct suggestions for critical intervention that are specific, measurable, achievable, and relevant. Recommendations should 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.

D. Expected Outputs and Deliverables

The MTR consultant shall prepare and submit:

1. MTR Inception Report: MTR consultant clarifies objectives and methods of the Midterm Review no later than 1 week before the MTR mission. To be sent to the Commissioning Unit and project management. Approximate due date: **26 February, 2018**
2. Presentation: Initial Findings presented to project management and the Commissioning Unit at the end of the MTR field mission. Approximate due date: **March 16/19, 2018**
3. Draft Final Report: Full report with annexes within 2 weeks of the MTR mission. Approximate due date: **April 9, 2018**
4. Final Report*: Revised report with annexed audit trail detailing how all received comments have (and have not) been addressed in the final MTR report. To be sent to the Commissioning Unit within 1 week of receiving UNDP comments on draft. Approximate due date: **April 30, 2018**

*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.

E. Institutional Arrangement

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 in the Republic of Armenia.

The Commissioning Unit will contract the consultant, and ensure the timely provision of due payments and travel arrangements within the country for the MTR consultant. The Project Team will be responsible for liaising with the MTR consultant to provide all relevant documents, set up stakeholder interviews, and arrange field visits.

The Certifying Officer of this assignment is Sustainable Development Dimension Chief.

F. Timeframe

The total duration of the MTR will be approximately 22 effective person-days over a period of 20 weeks starting 5 February, 2018. The tentative MTR timeframe is as follows:

- 3 days: Desk review and preparing MTR Inception Report;
- 2 days: Finalization and Validation of MTR Inception Report- latest start of MTR mission;
- 5 days: MTR mission: stakeholder meetings, interviews, field visits (including Mission wrap-up meeting & presentation of initial findings- earliest end of MTR mission);
- 8 days: Preparing draft report;
- 2 days: Incorporating audit trail on draft report;
- 2 days: Finalization of MTR report/Expected full MTR completion.

The start date of the contract is planned for February 5, 2018.

G. Duty Station

Travel:

- International travel for 5 effective person-days of field mission to Yerevan, Armenia will be required during the MTR mission;
- The Basic Security in the Field II and Advanced Security in the Field courses must be successfully completed prior to commencement of travel;

- **Statement of Medical Fitness for Work:**
Individual Consultants/Contractors whose assignments require travel and who are over 62 years of age are required, at their own cost, to undergo a full medical examination including x-rays and obtaining medical clearance from an UN - approved doctor prior to taking up their assignment. Where there is no UN office nor a UN Medical Doctor present in the location of the Individual Contractor prior to commencing the travel, either for repatriation or duty travel, the Individual Contractor may choose his/her own preferred physician to obtain the required medical clearance.
- **Inoculations/Vaccinations:**
Individual Consultants/Contractors are required to have vaccinations/inoculations when travelling to certain countries, as designated by the UN Medical Director. The cost of required vaccinations/inoculations, when foreseeable, must be included in the financial proposal. Any unforeseeable vaccination/inoculation cost will be reimbursed by UNDP;
- Consultant is required to comply with the UN security directives set forth under <https://dss.un.org/dssweb/> ;
- The Individual Consultant must obtain security clearance before travelling to the duty station;
- All envisaged travel costs must be included in the financial proposal. This includes all travel to duty station. UNDP should not accept travel costs exceeding those of an economy class ticket and daily allowance exceeding UNDP rates. Should the IC wish to travel on a higher class he/she should do so using their own resources.

REQUIRED SKILLS AND EXPERIENCE

H. Qualifications of the Successful Applicants

Qualifications	Evaluation weight for each qualification
Master's degree or higher in natural or chemical sciences or other closely related field	20 points
At least 10 years of work experience in relevant technical areas and project evaluation	20 points
Experience with results-based management evaluation methodologies and/or experience applying SMART targets and reconstructing or validating baseline scenarios	15 points
Project evaluation/review experiences within United Nations system	15 points
Experience working with the GEF or GEF-evaluations	10 points
Knowledge of priorities and basic principles of POPs management and relevant international best-practices would be an asset	5 points
Demonstrated understanding of issues related to gender and the Chemicals Focal Area, and/or experience in gender sensitive evaluation and analysis would be an asset	5 points
Excellent English communication skills (written and oral), knowledge of Russian would be an asset	5 points
Experience working in CIS countries and in the Caucasus countries;	5 points

Consultant Independence:

The consultant cannot 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 project's related activities.

APPLICATION PROCESS

I. Scope of Price Proposal and Schedule of Payments

Financial Proposal:

- Financial proposals must be “all inclusive” and expressed in a lump sum for the total duration of the contract. The term “all inclusive” implies all cost (professional fees, travel costs, living allowances, per diem costs, etc.);

- Individual on this contract is not UN staff and are therefore not entitled to DSAs. All living allowances required to perform the requirements of the ToR must be incorporated in the financial proposal, whether the fees are expressed as daily fees or lump sum amount.
- The lump sum is fixed regardless of changes in the cost components.

SCHEDULE OF PAYMENT

The service provider will be responsible for all personal administrative and travel expenses associated with undertaking this assignment including office accommodation, printing, stationary, telephone and electronic communications, and report copies incurred in this assignment. For this reason, the contract is prepared as a lump sum contract.

The remuneration of work performed will be conducted as follows: lump sum payable in 2 installments, upon satisfactory completion and approval by UNDP of all deliverables, including the Final MTR Report.

40% of the lump sum payment for Deliverables 1, 2, 3 - upon submission of the draft MTR Report;

60% of the lump sum payment for Deliverable 4 - upon finalization of the MTR Report.

Or, as otherwise agreed between the Commissioning Unit and the MTR consultant.

J. Recommended Presentation of Offer

- Completed **Letter of Confirmation of Interest and Availability** using the [template](#) provided by UNDP;
- Personal CV or a [P11 Personal History form](#)**, indicating all past experience from similar projects, as well as the contact details (email and telephone number) of the Candidate;
- Brief description of approach to work/technical proposal** of why the individual considers him/herself as the most suitable for the assignment, and a proposed methodology on how they will approach and complete the assignment; (max 1 page)
- Financial Proposal** that indicates the all-inclusive fixed total contract price, supported by a breakdown of costs, as per template provided. 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. See Letter of Confirmation of Interest template for financial proposal template.

Incomplete applications will be excluded from further consideration.

Criteria for 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

Documents with a subject "International Consultant for Mid-Term Evaluation" should be submitted no later than 15:00 (local time), November 20, 2017 to email: procurement@undp.am or by post to the address below: United Nations Development Programme, 14 Petros Adamyan, Yerevan 0010, Armenia

K. Criteria for Selection of the Best Offer

The award of the contract will be made to the Individual Consultant who has obtained the highest Combined Score and has accepted UNDP's General Terms and Conditions. Only those applications which are responsive and compliant will be evaluated. The offers will be evaluated using the "Combined Scoring method" where:

- The educational background and experience on similar assignments will be weighted a max. of 70%;
- The price proposal will weigh as 30% of the total scoring.

Annex A: List of documents for review by the MTR Consultant

ANNEX B: Guidelines on Contents for the Midterm Review Report¹⁵

ANNEX C: Midterm Review Evaluative Matrix Template

ANNEX D: UNEG Code of Conduct for Evaluators/Midterm Review Consultants

ANNEX E: MTR Ratings

ANNEX F: MTR Report Clearance Form

ANNEX G: Project Results Framework

¹⁵ The Report length should not exceed 40 pages in total (not including annexes).

Annex 3: Code of Conduct for Evaluators and Agreement Form

Evaluators / Consultants:

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

Mid-Term Review Consultant Agreement Form

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

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

Signed in Ottawa on February 25, 2018



Signature: _____

Name of Consultant: **Jean-Joseph Bellamy**

Annex 4: Review Matrix

The evaluation matrix below served as a general guide for the review. It provided directions for the review; particularly for the collection of relevant data. It was used as a basis for interviewing people and reviewing project documents. It also provided a basis for structuring the review report as a whole.

Reviewed Component	Sub-Question	Indicators	Sources	Data Collection Method
Review criteria: Relevance - How does the project relate to the main objectives of the GEF, UNDP and to the chemicals management strategy in Armenia?				
<i>Is the Project relevant to GEF objectives?</i>	<ul style="list-style-type: none"> How does the Project support the related strategic priorities of the GEF? Were GEF criteria for project identification adequate in view of actual needs? 	<ul style="list-style-type: none"> Level of coherence between project objectives and those of the GEF 	<ul style="list-style-type: none"> Project documents GEF policies and strategies GEF web site 	<ul style="list-style-type: none"> Documents analyses Interviews with government officials and other partners
<i>Is the Project relevant to UNDP objectives?</i>	<ul style="list-style-type: none"> How does the project support the objectives of UNDP in this sector? 	<ul style="list-style-type: none"> Existence of a clear relationship between project objectives and country programme objectives of UNDP 	<ul style="list-style-type: none"> Project documents UNDP strategies and programme 	<ul style="list-style-type: none"> Documents analyses Interviews with government officials and other partners
<i>Is the Project relevant to Armenia's chemical management objectives?</i>	<ul style="list-style-type: none"> Does the project follow the government's stated priorities? How does the Project support the elimination of obsolete pesticide stockpiles and addressing contaminated sites within a sound chemicals management strategy in Armenia? Does the project address the identified problem? How country-driven is the Project? Does the Project adequately take into account national realities, both in terms of institutional framework and programming, in its design and its implementation? To what extent were national partners involved in the design of the Project? 	<ul style="list-style-type: none"> Degree to which the project support the elimination of obsolete pesticide stockpiles and addressing contaminated sites within a sound chemicals management strategy Degree of coherence between the project and national priorities, policies and strategies; particularly related to the management of chemicals Appreciation from national stakeholders with respect to adequacy of project design and implementation to national realities and existing capacities? Level of involvement of Government officials and other partners into the project Coherence between needs expressed by national stakeholders and UNDP criteria 	<ul style="list-style-type: none"> Project documents National policies, strategies and programmes Key government officials and other partners 	<ul style="list-style-type: none"> Documents analyses Interviews with government officials and other partners
<i>Does the Project address the needs of target beneficiaries?</i>	<ul style="list-style-type: none"> How does the project support the needs of target beneficiaries? Is the implementation of the project been inclusive of all relevant Stakeholders? Are local beneficiaries and stakeholders adequately involved in project formulation and implementation? 	<ul style="list-style-type: none"> Strength of the link between project expected results and the needs of target beneficiaries Degree of involvement and inclusiveness of beneficiaries and stakeholders in project design and implementation 	<ul style="list-style-type: none"> Beneficiaries and stakeholders Needs assessment studies Project documents 	<ul style="list-style-type: none"> Document analysis Interviews with beneficiaries and stakeholders
<i>Is the Project internally coherent in its design?</i>	<ul style="list-style-type: none"> Was the project sourced through a demand-driven approach? Is there a direct and strong link between project expected results (Result and Resources Framework) and the project design (in terms of project components, choice of partners, structure, delivery mechanism, scope, budget, use of resources etc.)? 	<ul style="list-style-type: none"> Level of coherence between project expected results and internal project design logic Level of coherence between project design and project implementation approach 	<ul style="list-style-type: none"> Program and project documents Key project stakeholders 	<ul style="list-style-type: none"> Document analysis Key Interviews

Reviewed Component	Sub-Question	Indicators	Sources	Data Collection Method
	<ul style="list-style-type: none"> Is the length of the project conducive to achieve project outcomes? 			
<i>How is the Project relevant in light of other donors?</i>	<ul style="list-style-type: none"> With regards to Armenia, does the project remain relevant in terms of areas of focus and targeting of key activities? How does GEF help to fill gaps (or give additional stimulus) that are crucial but are not covered by other donors? 	<ul style="list-style-type: none"> Degree to which the project was coherent and complementary to other donor programming in Armenia List of programs and funds in which future developments, ideas and partnerships of the project are eligible? 	<ul style="list-style-type: none"> Other Donors' policies and programming documents Other Donor representatives Project documents 	<ul style="list-style-type: none"> Documents analyses Interviews with other Donors
Future directions for similar Projects	<ul style="list-style-type: none"> What lessons have been learnt and what changes could have been made to the project in order to strengthen the alignment between the project and the Partners' priorities and areas of focus? How could the project better target and address priorities and development challenges of targeted beneficiaries? 		<ul style="list-style-type: none"> Data collected throughout evaluation 	<ul style="list-style-type: none"> Data analysis
Review criteria: Effectiveness – To what extent have the expected outcomes and objectives of the project been achieved?				
<i>How is the Project effective in achieving its expected outcomes?</i>	<ul style="list-style-type: none"> How is the project being effective in achieving its expected outcomes? <ul style="list-style-type: none"> Capture and Containment of Obsolete Pesticide Stockpiles and Wastes Obsolete Pesticide Stockpile and Waste Elimination Institutional and Regulatory Capacity Strengthening for Sound Chemicals Management and Contaminated Sites Monitoring, learning, adaptive feedback, outreach, and evaluation 	<ul style="list-style-type: none"> New methodologies, skills and knowledge Change in capacity for information management: knowledge acquisition and sharing; effective data gathering, methods and procedures for reporting. Change in capacity for awareness raising <ul style="list-style-type: none"> Stakeholder involvement and government awareness Change in local stakeholder behavior Change in capacity in policy making and planning to improve the management of chemicals: <ul style="list-style-type: none"> Policy reform Legislation/regulation change Development of national and local strategies and plans Change in capacity in implementation and enforcement <ul style="list-style-type: none"> Design and implementation of risk assessments Implementation of national and local strategies and action plans through adequate institutional frameworks and their maintenance Monitoring, evaluation and promotion of pilots Change in capacity in mobilizing resources <ul style="list-style-type: none"> Leverage of resources Human resources Appropriate practices Mobilization of advisory services 	<ul style="list-style-type: none"> Project documents Key stakeholders including UNDP, Project Team, Representatives of Gov. and other Partners Research findings 	<ul style="list-style-type: none"> Documents analysis Meetings with main Project Partners Interviews with project beneficiaries
<i>How is risk and risk mitigation</i>	<ul style="list-style-type: none"> How well are risks and assumptions being managed? What is the quality of risk mitigation strategies developed? Are they sufficient? 	<ul style="list-style-type: none"> Completeness of risk identification and assumptions during project planning Quality of existing information systems in place to identify emerging risks and other issues? 	<ul style="list-style-type: none"> Atlas risk log Project documents and evaluations 	<ul style="list-style-type: none"> Document analysis Interviews

Reviewed Component	Sub-Question	Indicators	Sources	Data Collection Method
<i>being managed?</i>	<ul style="list-style-type: none"> Are there clear strategies for risk mitigation related with long-term sustainability of the project? 	<ul style="list-style-type: none"> Quality of risk mitigations strategies developed and followed 	<ul style="list-style-type: none"> UNDP, Project Staff and Project Partners 	
Future directions for similar Projects	<ul style="list-style-type: none"> What lessons have been learnt for the project to achieve its outcomes? What changes could have been made (if any) to the formulation of the project in order to improve the achievement of project's expected results? How could the project be more effective in achieving its results? 		<ul style="list-style-type: none"> Data collected throughout evaluation 	<ul style="list-style-type: none"> Data analysis
Review criteria: Efficiency – Has the project been implemented efficiently, cost-effectively and in-line with international and national norms and standards?				
<i>Is Project support channeled in an efficient way?</i>	<ul style="list-style-type: none"> Is adaptive management used or needed to ensure efficient resource use? Does the Project Results Framework and work plans and any changes made to them used as management tools during implementation? Are the accounting and financial systems in place adequate for project management and producing accurate and timely financial information? How adequate is the M&E framework (indicators & targets)? Are progress reports produced accurately, timely and responded to reporting requirements including adaptive management changes? Is project implementation as cost effective as originally proposed (planned vs. actual) Is the leveraging of funds (co-financing) happened as planned? Are financial resources utilized efficiently? Could financial resources have been used more efficiently? How is RBM used during project implementation? Is the project decision-making effective? Does the government provide continuous strategic directions to the project's formulation and implementation? Have these directions provided by the government guided the activities and outcomes of the project? Are there an institutionalized or informal feedback or dissemination mechanisms to ensure that findings, lessons learned and recommendations pertaining to project formulation and implementation effectiveness were shared among project stakeholders, UNDP staff and other relevant organizations for ongoing project adjustment and improvement? Does the project mainstream gender considerations into its implementation? 	<ul style="list-style-type: none"> Availability and quality of financial and progress reports Timeliness and adequacy of reporting provided Level of discrepancy between planned and utilized financial expenditures Planned vs. actual funds leveraged Cost in view of results achieved compared to costs of similar projects from other organizations Adequacy of project choices in view of existing context, infrastructure and cost Quality of RBM reporting (progress reporting, monitoring and evaluation) Occurrence of change in project formulation/ implementation approach (i.e. restructuring) when needed to improve project efficiency Existence, quality and use of M&E, feedback and dissemination mechanism to share findings, lessons learned and recommendation on effectiveness of project design. Cost associated with delivery mechanism and management structure compare to alternatives Gender disaggregated data in project documents 	<ul style="list-style-type: none"> Project documents and evaluations UNDP, Representatives of Gov. and Project Staff Beneficiaries and Project partners 	<ul style="list-style-type: none"> Document analysis Key Interviews

Reviewed Component	Sub-Question	Indicators	Sources	Data Collection Method
<i>How efficient are partnership arrangements for the Project?</i>	<ul style="list-style-type: none"> Is the government engaged? How does the government demonstrate its ownership of the projects? Did the government provide a counterpart to the project? To what extent partnerships/linkages between institutions/organizations are encouraged and supported? Which partnerships/linkages are facilitated? Which one can be considered sustainable? What is the level of efficiency of cooperation and collaboration arrangements? (between local actors, UNDP and relevant government entities) Which methods were successful or not and why? 	<ul style="list-style-type: none"> Specific activities conducted to support the development of cooperative arrangements between partners, Examples of supported partnerships Evidence that particular partnerships/linkages will be sustained Types/quality of partnership cooperation methods utilized 	<ul style="list-style-type: none"> Project documents and evaluations Project Partners UNDP, Representatives of Gov. and Project Staff Beneficiaries 	<ul style="list-style-type: none"> Document analysis Interviews
<i>Does the Project efficiently utilize local capacity in implementation ?</i>	<ul style="list-style-type: none"> Was an appropriate balance struck between utilization of international expertise as well as local capacity? Does the project support mutual benefits through sharing of knowledge and experiences, training, technology transfer among developing countries? Did the Project take into account local capacity in formulation and implementation of the project? Was there an effective collaboration with scientific institutions with competence in chemical management? 	<ul style="list-style-type: none"> Proportion of total expertise utilized taken from Armenia Number/quality of analyses done to assess local capacity potential and absorptive capacity 	<ul style="list-style-type: none"> Project documents and evaluations UNDP, Project Team and Project partners Beneficiaries 	<ul style="list-style-type: none"> Document analysis Interviews
Future directions for similar Projects	<ul style="list-style-type: none"> What lessons can be learnt from the project on efficiency? How could the project have more efficiently addressed its key priorities (in terms of management structures and procedures, partnerships arrangements etc....)? What changes could have been made (if any) to the project in order to improve its efficiency? 		<ul style="list-style-type: none"> Data collected throughout evaluation 	<ul style="list-style-type: none"> Data analysis
Review criteria: Impacts - Are there indications that the project has contributed to the protection of health and environment through elimination of obsolete pesticide stockpiles and addressing contaminated sites within a sound chemicals management strategy?				
<i>How is the Project effective in achieving its long-term objective?</i>	<ul style="list-style-type: none"> Will the project achieve its objective that is to protect the health and environment through elimination of obsolete pesticide stockpiles and addressing contaminated sites within a sound chemicals management strategy? 	<ul style="list-style-type: none"> Changes in capacity: <ul style="list-style-type: none"> To pool/mobilize resources To provide an enabling environment, For implementation of related strategies and programmes through adequate institutional frameworks and their maintenance, Changes in use and implementation of sustainable alternatives Changes to the quantity and strength of barriers such as change in: 	<ul style="list-style-type: none"> Project documents Key Stakeholders Research findings 	<ul style="list-style-type: none"> Documents analysis Meetings with UNDP, Project Team and project Partners Interviews with project beneficiaries and other stakeholders

Reviewed Component	Sub-Question	Indicators	Sources	Data Collection Method
		<ul style="list-style-type: none"> ○ Institutional barriers: absent role of local authorities, overriding licencing and environmental approval, processing imperatives, etc. ○ Legal and regulatory barriers: overlaps, conflicts and gaps ○ Low level of Information and awareness related to POPs pesticides and OP issues. ○ Deficits in technical capacity and supporting infrastructure ○ Last of effective financial resources 		
<i>How is the Project impacting the local environment?</i>	<ul style="list-style-type: none"> ■ What are the impacts or likely impacts of the project on? <ul style="list-style-type: none"> ○ Local environment; ○ Poverty; and, ○ Other socio-economic issues. 	<ul style="list-style-type: none"> ■ Provide specific examples of impacts at those three levels, as relevant 	<ul style="list-style-type: none"> ■ Project documents ■ Key Stakeholders ■ Research findings 	<ul style="list-style-type: none"> ■ Data analysis ■ Interviews with key stakeholders
Future directions for the Project	<ul style="list-style-type: none"> ■ How could the project build on its successes and learn from its weaknesses in order to enhance the potential for impact of ongoing and future initiatives? 		<ul style="list-style-type: none"> ■ Data collected throughout evaluation 	<ul style="list-style-type: none"> ■ Data analysis
Review criteria: Sustainability - To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining long-term project results?				
<i>Are sustainability issues adequately integrated in Project design?</i>	<ul style="list-style-type: none"> ■ Were sustainability issues integrated into the formulation and implementation of the project? ■ Does the project employ government implementing and/or monitoring systems? ■ Is the government involved in the sustainability strategy for project outcomes? 	<ul style="list-style-type: none"> ■ Evidence/Quality of sustainability strategy ■ Evidence/Quality of steps taken to address sustainability 	<ul style="list-style-type: none"> ■ Project documents and evaluations ■ UNDP, project staff and project Partners ■ Beneficiaries 	<ul style="list-style-type: none"> ■ Document analysis ■ Interviews
<i>Did the project adequately address financial and economic</i>	<ul style="list-style-type: none"> ■ Did the project adequately address financial and economic sustainability issues? ■ Are the recurrent costs after project completion sustainable? 	<ul style="list-style-type: none"> ■ Level and source of future financial support to be provided to relevant sectors and activities after project end? ■ Evidence of commitments from international partners, governments or other stakeholders to financially support relevant sectors of activities after project end ■ Level of recurrent costs after completion of project and funding sources for those recurrent costs 	<ul style="list-style-type: none"> ■ Project documents and evaluations ■ UNDP, project staff and project Partners ■ Beneficiaries 	<ul style="list-style-type: none"> ■ Document analysis ■ Interviews

Reviewed Component	Sub-Question	Indicators	Sources	Data Collection Method
<i>sustainability issues?</i>				
<i>Organizations arrangements and continuation of activities</i>	<ul style="list-style-type: none"> Are results of efforts made during the project implementation period well assimilated by organizations and their internal systems and procedures? Is there evidence that project partners will continue their activities beyond project support? Has there been a buy-in process, or was there no need to sell the project and buy support? What degree is there of local ownership of initiatives and results? Are appropriate 'champions' being identified and/or supported? 	<ul style="list-style-type: none"> Degree to which project activities and results have been taken over by local counterparts or institutions/organizations Level of financial support to be provided to relevant sectors and activities by in-country actors after project end Number/quality of champions identified 	<ul style="list-style-type: none"> Project documents and evaluations UNDP, project staff and project Partners Beneficiaries 	<ul style="list-style-type: none"> Document analysis Interviews
<i>Enabling Environment</i>	<ul style="list-style-type: none"> Are laws, policies and frameworks addressed through the project, in order to address sustainability of key initiatives and reforms? Are the necessary related capacities for lawmaking and enforcement built? What is the level of political commitment to build on the results of the project? 	<ul style="list-style-type: none"> Efforts to support the development of relevant laws and policies State of enforcement and law making capacity Evidence of commitment by the political class through speeches, enactment of laws and resource allocation to priorities 	<ul style="list-style-type: none"> Project documents and evaluations UNDP, project staff and project Partners Beneficiaries 	<ul style="list-style-type: none"> Document analysis Interviews
<i>Institutional and individual capacity building</i>	<ul style="list-style-type: none"> Is the capacity in place at the national, and local level adequate to ensure sustainability of results achieved to date? 	<ul style="list-style-type: none"> Elements in place in those different management functions, at appropriate levels (national and local) in terms of adequate structures, strategies, systems, skills, incentives and interrelationships with other key actors 	<ul style="list-style-type: none"> Project documents and evaluations UNDP, Project staff and project Partners Beneficiaries Capacity assessments available, if any 	<ul style="list-style-type: none"> Interviews Documentation review
<i>Social and political sustainability</i>	<ul style="list-style-type: none"> Did the project contribute to key building blocks for social and political sustainability? Did the project contribute to local Stakeholders' acceptance of the new practices? 	<ul style="list-style-type: none"> Example of contributions to sustainable political and social change with regard to the management of chemicals 	<ul style="list-style-type: none"> Project documents and evaluations UNDP, project staff and project Partners Beneficiaries 	<ul style="list-style-type: none"> Interviews Documentation review
<i>Replication</i>	<ul style="list-style-type: none"> Were project activities and results replicated elsewhere and/or scaled up? What was the project contribution to replication or scaling up of innovative practices or mechanisms to improve the management of chemicals? Does the project has a catalytic role? 	<ul style="list-style-type: none"> Number/quality of replicated initiatives Number/quality of replicated innovative initiatives Volume of additional investment leveraged 	<ul style="list-style-type: none"> Other donor programming documents Beneficiaries UNDP, project staff and project Partners 	<ul style="list-style-type: none"> Document analysis Interviews
<i>Challenges to sustainability of the Project</i>	<ul style="list-style-type: none"> What are the main challenges that may hinder sustainability of efforts? Have any of these been addressed through project management? What could be the possible measures to further contribute to the sustainability of efforts achieved with the project? 	<ul style="list-style-type: none"> Challenges in view of building blocks of sustainability as presented above Recent changes which may present new challenges to the project 	<ul style="list-style-type: none"> Project documents and evaluations Beneficiaries UNDP, project staff and project Partners 	<ul style="list-style-type: none"> Document analysis Interviews

Reviewed Component	Sub-Question	Indicators	Sources	Data Collection Method
Future directions for the Project	<ul style="list-style-type: none"> Which areas/arrangements under the project show the strongest potential for lasting long-term results? What are the key challenges and obstacles to the sustainability of results of project initiatives that must be directly and quickly addressed? How can the experience and good project practices influence the strategies to transform the management of chemicals in Armenia? Are national decision-making institutions (Parliament, Government etc.) ready to improve their measures to transform the management of chemicals in Armenia? 		<ul style="list-style-type: none"> Data collected throughout evaluation 	<ul style="list-style-type: none"> Data analysis

Annex 5: List of Documents Reviewed

Anahit Aleksandryan, Artak Khachatryan, *Armenia – Inventories of PCBs is the Place to Start*

Anahit Aleksandryan, *How the Stockholm Convention Triggered Positive Changes in Chemicals Management in the Republic of Armenia*

Anahit Aleksandryan, *Main Changes to the Sound Management of PCBs and POPs Wastes in Armenia*

Artak Khachatryan, *Good Practices and Lessons Learned during Development of NIP*

ATI, *Price List for Model HP with Filter*

Carlo Lupi, November 2017, *Back to Office Report – Nov. 14-18, 2017*

Carlo Lupi, *Roadmap for the Selection of a Technology for Class 2 POP Contaminated Soil in Armenia*

Dekonta, December 2017, *Comprehensive Site Mapping and Analytical Assessment Report and Annexes*

Dekonta, December 2017, *Review and Update Risk Assessment and Classification Criteria Report*

FAO, June 2016, *Obsolete Pesticides Safeguarding and Disposal Environmental Assessment (EA) and Environmental Management Plan (EMP) - Armenia*

FAO-OED, December 2013, *Evaluation Report: Capacity Building on Obsolete and POPs Pesticides in Eastern European Caucasus and Central Asian (EECCA) countries*

GEF, December 2011, *Revised PIF*

GEF, *GEF Council Notification*

GEF, *GEF-5 Focal Area Strategies*

GEF, *GEF-6 Programming Directions*

GEF, *Review Sheet: Jan. 2012, Nov. 2014*

GEF, *Request for CEO Endorsement*

GEF-EO, April 2013, *Terminal Evaluation Review form: Evaluation Report: Capacity Building on Obsolete and POPs Pesticides in Eastern European Caucasus and Central Asian (EECCA) countries*

GEF-EO, April 2013, *Terminal Evaluation Review form: Technical Assistance for Environmentally Sustainable Management of PCBs and other POPs Waste in the Republic of Armenia*

GOA, April 6, 2017, *Extract from the Protocol of the Government Session of the Republic of Armenia: on the Approval of the Disaster Risk Management National Strategy and the Action Plan*

GOA, December 8, 2017, *State Budget Law for 2018*

GOA, July 8, 2010, *Decree #861-N, Population Protection Plan in case of Hazardous Chemical Accidents in the Republic of Armenia and Emergency Response Operations*

GOA, June 19, 2017, *Government Decision No 646-A: Program of the Government of the Republic of Armenia – 2017-2022*

GOA, March 27, 2014, *Decree #422-N Armenia Development Strategy for 2014-2025*

GOA, October 30, 2008, *Republic of Armenia - Sustainable Development Strategy*

GOA, September 28, 2017, *Government Protocol No 41: Security Support Strategy and Program for Biological, Chemical and Radium*

GOA, UNDP, *Agreement between the GOA and UNDP Regarding Assistance to and Cooperation with the Government*

POPs Project, *Annual Work Plans: 2015, 2016, 2017, 2018*

POPs Project, *First Tender Documents for the Detailed Design, Technical Definition of Works and Supporting Assessments/Studies required for the Removal of POPs Pesticides and Recovery of Associated*

Contaminated Soil along with Site Cleanup, Stabilization, Containment, and Monitoring applied to the Nubarashen POPs Burial Site (Yerevan, Armenia)

POPs Project, January 19, 2018, *2017 Progress – 2018 Plan – V Project Management Board Meeting*

POPs Project, *PIRs: 2016, 2017*

POPs Project, *PMB Meeting Minutes: Jan. 2016, Nov. 2016, Apr. 2017, Jun. 2017*

POPs Project, *POPs Budget Revisions*

POPs Project, *Second Tender Documents for the Detailed Design, Technical Definition of Works and Supporting Assessments/Studies required for the Removal of POPs Pesticides and Recovery of Associated Contaminated Soil along with Site Cleanup, Stabilization, Containment, and Monitoring applied to the Nubarashen POPs Burial Site (Yerevan, Armenia)*

POPs Project, *Site Clean-up and Waste Disposal Roadmap*

POPs Project, *Standard Progress Report – Jul.-Dec. 2015, Jan.-Jun, 2016, Jul.-Dec. 2016, Jan.-Jun. 2017, Jan.-Dec. 2017*

POPs Project, *Terms of Reference Amended for the Detailed Design, Technical Definition of Works and Supporting Assessments/Studies required for the Removal of POPs Pesticides and Recovery of Associated Contaminated Soil along with Site Cleanup, Stabilization, Containment, and Monitoring applied to the Nubarashen POPs Burial Site (Yerevan, Armenia)*

Rick Cooke, December 2015, *Inception Mission Notes*

Rick Cooke, December 2015, *International Progress in POPs Management*

Rodrigo Romero (Dr.), Seyran Minasyan (Dr.), July 2017, *Upgrading National laboratory Capacity Related to POPs and Hazardous Chemicals and Waste in Armenia*

STAP, *Screening of the PIF*

UN, April 14, 2015, *Country Programme Document for Armenia (2016-2020)*

UN Armenia, GOA, Armenia - *United Nations Development Assistance Framework – 2016-2020*

UNDP, *Back to Office Reports: December 2015, April 2016 and February 2018*

UNDP, *Combined Delivery Reports: 2015, 2016, 2017, Jan-Feb 2018*

UNDP, *Delegation of Authority*

UNDP, GEF, GOA, May 2016, *Project Inception Report*

UNDP, GEF, GOA, *Project Document*

UNDP, GEF, GOA, February 9, 2015, *Local Project Appraisal Committee (LPAC) Meeting Minutes*

UNDP, GEF, *Project-level Monitoring – Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF Financed Projects*

UNDP, GOA, 2016, *Country Programme Action Plan Between the Government of the Republic of Armenia and the United Nations Development Programme – 2016-2020*

UNDP, *Request for Expression of Interest (REOI): ITB 071/17 - Prequalification Clean-up and Disposal services for pesticide contaminated soil from the Nubarashen site, Yerevan, Armenia*

UNDP, *Terms of Reference: First Assignment for POPs International Consultant Services (R. Romero)*

UNDP, *Terms of Reference: First Assignment for POPs International Consultant (IC) Services (R. Cooke)*

UNDP, *Terms of Reference for the Recruitment of the Provider of “Clean-up and Disposal services for pesticide contaminated soil from the Nubarashen site, Yerevan, Armenia”*

UNDP, *Terms of Reference: International Consultant on Contaminated Soil Clean-up/Remediation Technologies*

UNDP, *Terms of Reference: Second Assignment for POPs International Consultant (IC) Services (R. Cooke)*

UNIDO, GEF, GOA, 2005, *National Implementation Plan for the SC on POPs*

UNIDO, GEF, GOA, August 2012, *Technical Assistance for Environmentally Sustainable Management of PCBs and other POPs Waste in the Republic of Armenia*

UNIDO, GEF, UNDP, *Project Document – POPs Legacy Elimination and POPs Release Reduction Project – Turkey*

_____, 2017, *Evaluation Matrix of Clean-up Options*

_____, 2018, *Technology Comparison Table*

_____, *Annex 2.13 Protocol of Health Risk Assessment*

_____, December 8, 2016, *Extract from Government Protocol-Decree No 49 on Approving the list of measures for the implementation of the Republic of Armenia (RA) commitments under the number of International environmental treaties ratified by the RA*

_____, *Development and Deployment of Alternatives to DDT for Disease Vector Control*

_____, February 22, 2007, *First National Report to the SC*

_____, *First Announcement: Terms of Reference for the design/operational planning/approvals of construction works applicable to the development of a national chemical hazardous waste storage and management facility, based on upgrading of an existing storage facility near Hrazdan town in Kotayk region of Armenia*

_____, *List of Project Advisory Committee Members*

_____, October 29, 2010, *Second National Report to the SC*

_____, *POPs Project Management Structure*

_____, *Report on Obsolete Pesticides Storehouses*

_____, *Second Announcement: Terms of Reference for the design/operational planning/approvals of construction works applicable to the development of a national hazardous chemical waste storage and management facility, based on upgrading of the existing storage facility near Hrazdan town in Kotayk region of Armenia*

_____, *Summary of Public Presentation: "Design, Operational Planning, Providing Proper Agreements for Construction of a Hazardous Chemical Wastes National Storage and Management Area on the Basis of Modern Warehousing Area in Kotayk Region of Armenia (Hrazdan)"*

_____, *Third National Report to the SC*

_____, *UNDP Comments to the NBS Risk Re-Assessment*

Main Website Consulted

am.undp.org

thegef.org

chm.pops.int

gov.am

tert.am

mnp.am

Annex 6: Interview Guide

Note: This is a guide for the Evaluator (a simplified version of the review matrix). Not all questions will be asked to each interviewee; it is a reminder for the interviewer about the type of information required to complete the review exercise and a guide to prepare the semi-structured interviews. Confidentiality will be guaranteed to the interviewees and the findings once “triangulated” will be incorporated in the report.

I. RELEVANCE - *How does the project relate to the main objectives of the GEF, UNDP and to the chemicals management strategy in Armenia?*

- I.1. Is the Project relevant to GEF objectives?
- I.2. Is the Project relevant to UNDP objectives?
- I.3. Is the Project relevant to Armenia’s chemical management objectives?
- I.4. Does the Project address the needs of target beneficiaries?
- I.5. Is the Project internally coherent in its design?
- I.6. How is the Project relevant in light of other donors?

Future directions for similar projects

- I.7. What lessons have been learnt and what changes could have been made to the project in order to strengthen the alignment between the project and the Partners’ priorities and areas of focus?
- I.8. How could the project better target and address priorities and development challenges of targeted beneficiaries?

II. EFFECTIVENESS – *To what extent have the expected outcomes and objectives of the project been achieved?*

- II.1. How is the Project effective in achieving its expected outcomes?
 - Capture and Containment of Obsolete Pesticide Stockpiles and Wastes
 - Obsolete Pesticide Stockpile and Waste Elimination
 - Institutional and Regulatory Capacity Strengthening for Sound Chemicals Management and Contaminated Sites
 - Monitoring, learning, adaptive feedback, outreach, and evaluation
- II.2. How is risk and risk mitigation being managed?

Future directions for similar projects

- II.3. What lessons have been learnt for the project to achieve its outcomes?
- II.4. What changes could have been made (if any) to the formulation of the project in order to improve the achievement of project’s expected results?
- II.5. How could the project be more effective in achieving its results?

III. EFFICIENCY - *Has the project been implemented efficiently, cost-effectively and in-line with international and national norms and standards?*

- III.1. Is adaptive management used or needed to ensure efficient resource use?
- III.2. Do the *Project Results Framework* and work plans and any changes made to them used as management tools during implementation?
- III.3. Are accounting and financial systems in place adequate for project management and producing accurate and timely financial information?
- III.4. How adequate is the M&E framework (indicators & targets)?
- III.5. Are progress reports produced accurately, timely and respond to reporting requirements including adaptive management changes?
- III.6. Is project implementation as cost effective as originally proposed (planned vs. actual)?
- III.7. Is the leveraging of funds (co-financing) happening as planned?
- III.8. Are financial resources utilized efficiently? Could financial resources have been used more efficiently?
- III.9. How is RBM used during project implementation?
- III.10. Are there an institutionalized or informal feedback or dissemination mechanism to ensure that findings, lessons learned and recommendations pertaining to project formulation and implementation

effectiveness were shared among project stakeholders, UNDP Staff and other relevant organizations for ongoing project adjustment and improvement?

III.11. Does the project mainstream gender considerations into its implementation?

III.12. Is the government engaged?

III.13. To what extent are partnerships/ linkages between institutions/ organizations encouraged and supported?

III.14. Which partnerships/linkages are facilitated? Which one can be considered sustainable?

III.15. What is the level of efficiency of cooperation and collaboration arrangements? (between local actors, UNDP, and relevant government entities)

III.16. Is an appropriate balance struck between utilization of international expertise as well as local capacity?

III.17. Did the project take into account local capacity in design and implementation of the project?

Future directions for the project

III.18. What lessons can be learnt from the project on efficiency?

III.19. How could the project have more efficiently addressed its key priorities (in terms of management structures and procedures, partnerships arrangements, etc., ...)?

IV. IMPACTS - *Are there indications that the project has contributed to the protection of health and environment through elimination of obsolete pesticide stockpiles and addressing contaminated sites within a sound chemicals management strategy?*

IV.1. Will the project achieve its objective that is to protect the health and environment through elimination of obsolete pesticide stockpiles and addressing contaminated sites within a sound chemicals management strategy?

IV.2. How is the Project impacting the local environment?

Future directions for the project

IV.3. How could the project build on its successes and learn from its weaknesses in order to enhance the potential for impact of ongoing and future initiatives?

V. SUSTAINABILITY - *To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining long-term project results?*

V.1. Were sustainability issues adequately integrated in project formulation?

V.2. Does the project adequately address financial and economic sustainability issues?

V.3. Is there evidence that project partners will continue their activities beyond project support?

V.4. Are laws, policies and frameworks being addressed through the project, in order to address sustainability of key initiatives and reforms?

V.5. Is the capacity in place at the national and local levels adequate to ensure sustainability of results achieved to date?

V.6. Does the project contribute to key building blocks for social and political sustainability?

V.7. Are project activities and results being replicated elsewhere and/or scaled up?

V.8. What are the main challenges that may hinder sustainability of efforts?

Future directions for the project

V.9. Which areas/arrangements under the project show the strongest potential for lasting long-term results?

V.10. What are the key challenges and obstacles to the sustainability of results of project initiatives that must be directly and quickly addressed?

Annex 7: Review Mission Agenda

A G E N D A

For Mr. Jean-Jo Bellamy, Consultant for Mid-Term Evaluation of

UNDP supported and GEF financed “Elimination of obsolete pesticide stockpiles and addressing POPs contaminated sites within a Sound Chemicals Management Framework in Armenia” Project implementation

14 – 21 March, 2018

Date/Time	Meeting with /at	Purpose of meeting/issues for discussion	Participants to be present
Day 1, Wednesday - 14.03.2018			
09:30 – 10:30	Mr. Armen Martirosyan Sustainable Growth and Resilience Portfolio Analyst and the Project Team UNDP Venue – 14 P. Adamyan str., UN House	<ul style="list-style-type: none"> • Brief introduction on the Project status • Organizing mission meetings • Discuss opportunities and challenges for the Project implementation 	Mr. Georgi Arzumanyan, Programme Policy Adviser, SGR portfolio, UNDP Mrs. Gayane Gharagebakyan, POPs Project Coordinator, UNDP Mr. Vardan Tserunyan, Project Technical Task Leader, UNDP Mrs. Kristina Tereshchatova – Project Assistant, UNDP
10:45 – 11:45 Confirmed	Mr. Khachik Hakobyan , Deputy Minister, PMB co-chair / Tel.: 011 818 560 Ministry of Nature Protection Venue: Government bld. 3	<ul style="list-style-type: none"> • Project implementation strategy – vision, main approaches, main challenges • Project milestones • MNP position towards project implementation • GOA commitments 	Jean-Joseph Bellamy Translator
12:30 – 13:30 Confirmed	Mr. Vrej Gabrielyan , Deputy Head of Rescue service, PMB co-chair / Tel: 091 402 896 Ministry of Emergency Situations 09/8 A. Mikoyan Str. 4th Block of Davitashen	<ul style="list-style-type: none"> • Project implementation strategy – vision, main approaches, main challenges • Project milestones • MES position towards project implementation • GOA commitments 	Jean-Joseph Bellamy Translator
13:30 – 15:00 Lunch			
15:30 – 16:30 TBC	Mr. Kamo Areyan , First Deputy Mayor of Yerevan / PMB member Tel.: 099 191 907 /010 514 238 – Vahan Assistant	<ul style="list-style-type: none"> • Project implementation strategy – vision, main approaches, main challenges • GOA and Yerevan Municipality commitments 	Jean-Joseph Bellamy Translator

Mid-term Review of the UNDP-GEF-Government of Armenia Project “Elimination of obsolete pesticide stockpiles and addressing POPs contaminated sites within a Sound Chemicals Management Framework in Armenia” (PIMS 4905)

	Argishti St., 1 Building		
15:30 – 16:30 Confirmed	Mrs. Lilia Shushanyan , Adviser to the Head–Minister of the Staff of the Government of Armenia / PMB member Tel.: 094 020 629 Government House 1, Republic Square	<ul style="list-style-type: none"> • To present project implementation strategy, main approaches, potential challenges • Government commitments • GOA commitments 	Jean-Joseph Bellamy Translator
Return UNDP office for summarizing and planning the next day			
Day 2, Thursday - 15.03.2018			
09:30 – 10:30 Confirmed	Mr. Arman Hovhannisyan , Head of UN Desk PMB member Ministry of Foreign Affairs Government Building 2 / Tel.: 041 312 727	<ul style="list-style-type: none"> • Project strategy and potential challenges • Partnership opportunities and coordination • GOA commitments 	Jean-Joseph Bellamy
11:00 – 12:00 Confirmed	Mrs. Elena Manvelyan , President of the NGO Armenian Women for Health and Healthy Environment (AWHHE) / Tel.: 091 197 997 Mrs. Lilik Simonyan / PAC member 24B, Baghramyan Ave.	<ul style="list-style-type: none"> • Project strategy and potential challenges • Partnership opportunities and coordination 	Jean-Joseph Bellamy Translator
12:30 – 13:30 Confirmed	Mr. Albert Manukyan , Director of engineering “Elektronnakhagits” design company, 41A Halabyan str. Tel.: 091 961 027 Edita Vardgesyan , EIA specialist	<ul style="list-style-type: none"> • Project strategy and potential challenges • Partnership opportunities and coordination 	Jean-Joseph Bellamy Translator
13:45 – 15:00 Lunch			
15:15 – 16:00 Confirmed	Mrs. Inga Zarafyan , president of EcoLur NGO 49/2 Hanrapetutyan St. Tel.: 010 562 020 / 091 921 264	<ul style="list-style-type: none"> • Project strategy and potential challenges • Partnership opportunities and coordination 	Jean-Joseph Bellamy Translator
16:00 – 18:00	Nubarashen site visit		Jean-Joseph Bellamy Mr. Gagik Karapetyan / Project Engineering Consultant
Day 3, Friday - 16.03.2018			

09:30 – 12:00 Confirmed	Mrs. Anahit Gabrielyan & Mr. Hrachya Husikyan / Advisers to the Hrazdan Mayor/ Kotayk marz, Tel.: 060 460 146/8 093 220 562 Hrazdan Municipality / Kotayk Marzpetaran	<ul style="list-style-type: none"> • Project implementation strategy • Project challenges 	Jean-Joseph Bellamy Translator
12:30 – 13:30 TBC	Mr. Arthur Hovhannisyan Lieutenant-Colonel, Head of Operative division of the Department of Radiation, Chemical and Biological Defense, Ministry of Defense of the RA / PAC member / Bagrevandi 5, Yerevan Tel.: 099 520 471	<ul style="list-style-type: none"> • Project implementation strategy, main approaches, potential challenges 	Jean-Joseph Bellamy Translator
12:45 – 14:00 Lunch			
14:45 – 15:45 Confirmed	Mrs. Nune Bakunts Deputy Director of Disease control and preventions national center / MOH / PAC member / Tel.: 091 423 185 Davtashen, 2a Building	<ul style="list-style-type: none"> • Project implementation strategy, main approaches, potential challenges 	Jean-Joseph Bellamy Translator
16:15 – 17:00 Confirmed	Mrs. Karine Yesayan Head of the Horticulture Development and Plant Protection Division of Department of Plant Growing and Plant Protection, Ministry of Agriculture of the RA / PAC member Government House 3, Aram Street / Tel.: 093 455 293	<ul style="list-style-type: none"> • Project implementation strategy, main approaches, potential challenges • Agricultural policy and national activities on obsolete pesticides related issues • Status of the EU funded regional project on OPs 	Jean-Joseph Bellamy Translator
17:15 – 18:30	Team meeting / UNDP office	<ul style="list-style-type: none"> • Summarize meeting findings • Preparation to the next meetings 	Mission team
Day 4, Saturday - 17.03.2018			
09:30 – 11:00 Confirmed	Mr. Ashot Harutyunyan , Deputy Minister of Agriculture PMB member Ministry of Agriculture, Government House 3, Aram Street, Tel: 077 999 001	<ul style="list-style-type: none"> • Project implementation strategy, main approaches, potential challenges • Agricultural policy and national activities on obsolete pesticides related issues • Status of the EU funded regional project on OPs • GOA commitments 	Jean-Joseph Bellamy Translator

11:30 – 13:00 Confirmed	Mr. Levon Farmanyany , Head of Eurasian Economic Union and EurAsEC Member States Cooperation division – Deputy head of Department, PMB member Ministry of Finance, 1 Melik-Adamyan	<ul style="list-style-type: none"> • Project implementation strategy, main approaches, potential challenges • Government commitments 	Jean-Jo Bellamy Translator
13:00 – 14:30 Lunch			
14:45 – 16:00 Confirmed	Mrs. Anahit Aleksandryan Head of Hazardous Substances and Waste Policy Division, MNP / Stockholm Convention Focal Point / Government House 3, Aram Str., Tel.: 011 818 519	<ul style="list-style-type: none"> • Project implementation strategy, main approaches, potential challenges • MNP policy and national activities on obsolete pesticides related issues 	Jean-Joseph Bellamy Translator
16:30 – 17:30 Confirmed	Mr. Ashot Harutyunyan , Deputy Minister of Agriculture PMB member Ministry of Agriculture, Government House 3, Aram Street, Tel: 077 999 001	<ul style="list-style-type: none"> • Project implementation strategy, main approaches, potential challenges • Agricultural policy and national activities on obsolete pesticides related issues • Status of the EU funded regional project on OPs • GOA commitments 	Jean-Joseph Bellamy Translator
Day 5, Sunday - 18.03.2018			
10:00 – 18:00	Work from home	<ul style="list-style-type: none"> • Summarize meeting findings • Mission report outlining 	Mr. Jean-Joseph Bellamy
Day 6, Monday - 19.03.2018			
10:00 – 11:00 Confirmed	Mr. Artavazd Davtyan , Deputy Head of Rescue service, PAC member 09/8 A. Mikoyan Str. 4th Block of Davitashen Tel.: 091 511 090 Mr. Karapet Karapetyan , Head of Division / PAC member Tel.: 091 511 0217	<ul style="list-style-type: none"> • Project implementation strategy – vision, main approaches, main challenges • Project milestones • MES position towards project implementation and commitments 	Jean-Joseph Bellamy Translator
11:10 – 12:00	Mr. Karapet Karapetyan , Head of Division / PAC members	<ul style="list-style-type: none"> • Project implementation strategy – vision, main approaches, main challenges 	Jean-Joseph Bellamy Translator

Confirmed	09/8 A. Mikoyan Str. 4th Block of Davitashen Tel.: 091 511 0217	<ul style="list-style-type: none"> • Project milestones • MES position towards project implementation and commitments 	
12:30 – 13:30 Confirmed	Mr. Simon Papyan , Director of “Environmental Monitoring and Information Center” SNCO Laboratory Ms. Gayane Shahnazaryan , Deputy Head for lab services / 46 Charentsi / Tel.: 010 555 502 / 010 272 007, 094 53 52 50 Gayane	<ul style="list-style-type: none"> • Project strategy and potential challenges • Partnership opportunities and coordination 	Jean-Joseph Bellamy Translator
13:15 – 14:30 Lunch			
15:00 - 16:00 Confirmed	Mr. Shane Rosenthal / ADB Country Director 10 V. Sargsyan Street, 3rd Floor, Offices 79-81, Piazza Grande Armine Yedigaryan – Environmental specialist	<ul style="list-style-type: none"> • Project aim • ADB country mission 	Jean-Joseph Bellamy
16:30 – 18:00	Nubarashen site visit		Jean-Joseph Bellamy Mr. Gagik Karapetyan / Project Engineering Consultant
Day 7, Tuesday - 20.03.2018			
09:15 – 9:45	De-briefing – Mr. Armen Martirosyan, UNDP Sustainable Growth and Resilience (SGR) portfolio manager	<ul style="list-style-type: none"> • Mission findings • Mission report outlining, next steps and actions 	Jean-Joseph Bellamy
9:45 – 10:30	Meeting with Mr. Georgi Arzumanyan, UNDP SGR portfolio Program Policy Adviser	<ul style="list-style-type: none"> • Mission findings • Mission report outlining, next steps and actions 	Jean-Joseph Bellamy
10:30 – 13:00	Project team work / UNDP office	<ul style="list-style-type: none"> • Mission findings • Mission report outlining, next steps and actions 	Jean-Joseph Bellamy Project team
12:30 – 14:00 Lunch			
14:00 – 18:00	Project team work / UNDP office	<ul style="list-style-type: none"> • Mission findings • Mission report outlining, next steps and actions 	Jean-Joseph Bellamy Project team
Day 8, Wednesday - 21.03.2018			
	Departure		

Annex 8: List of People Interviewed

Name	Organization
Mr. Ajiniyaz Reimov	Programme and Research Analyst, UNDP Montreal Protocol/Chemicals Unit
Mr. Albert Manukyan	Director, Engineering “Elektronnakhagits” Company
Mrs. Anahit Gabrielyan	Advisers to the Hrazdan Mayor, Hrazdan Municipality / Kotayk Marzpetaran
Mrs. Anahit Aleksandryan	Head of Hazardous Substances and Waste Policy Division, Ministry of Nature Protection / Stockholm Convention Focal Point
Mr. Arman Hovhannisyan	Head of UN Desk, Ministry of Foreign Affairs / PMB member
Mr. Armen Martirosyan	Sustainable Growth and Resilience Portfolio Analyst and the Project Team, UNDP
Ms. Armine Yedigaryan	Environmental specialist, ADB
Mr. Artavazd Davtyan	Deputy Head of Rescue service, PAC member
Mr. Ashot Harutyunyan	Deputy Minister, Ministry of Agriculture / PMB member
Mr. Carlo Lupi	Project International Adviser
Ms. Edita Vardgesyan	EIA specialist, Engineering “Elektronnakhagits” Company
Mrs. Elena Manvelyan	President of the NGO Armenian Women for Health and Healthy Environment (AWHHE)
Mr. Gagik Karapetyan	Project Expert
Mrs. Gayane Gharagebakyan	Project Coordinator
Ms. Gayane Shahnazaryan	Deputy Head for lab services
Mr. Georgi Arzumanyan	SGR portfolio Program Policy Adviser, UNDP
Mr. Hrachya Husikyan	Advisers to the Hrazdan Mayor, Hrazdan Municipality / Kotayk Marzpetaran
Mr. Karapet Karapetyan	Head of Division / PAC member
Mrs. Karine Yesayan	Head of the Horticulture Development and Plant Protection, Division of Department of Plant Growing and Plant Protection, Ministry of Agriculture / PAC member
Mr. Khachik Hakobyan	Deputy Minister, Ministry of Nature Protection / PMB co-chair
Mrs. Kristina Tereshchatova	Project Assistant
Mr. Levon Farmanyan	Head of Eurasian Economic Union and EurAsEC Member States Cooperation division, Deputy head of Department, Ministry of Finance / PMB member
Mrs. Lilia Shushanyan	Adviser to the Head–Minister of the Staff of the Government of Armenia / PMB member
Mrs. Lilik Simonyan	NGO Armenian Women for Health and Healthy Environment (AWHHE) / PAC member
Mr. Maksim Surkov	UNDP Regional Technical Advisor (RTA)
Mrs. Nune Bakunts	Deputy Director, Disease control and preventions national center / Ministry of Health / PAC member
Mr. Rick Cooke	First Project International Adviser
Mr. Rodrigo Romero	Project International Adviser

Name	Organization
Mr. Shane Rosenthal	ADB Country Director
Mr. Simon Papyan	Director of “Environmental Monitoring and Information Center” SNCO Laboratory
Mr. Vardan Tserunyan	Project Expert
Mr. Vrej Gabrielyan	Deputy Head of Rescue service, Ministry of Emergency Situations / PMB co-chair
Nubarashen site visit with Mr. Gagik Karapetyan	

Met 34 people (13 women and 21 men).

Annex 9: Project Design and Cost Estimates by Activity

Table copied from the project document “Table 10: Elaborated project design framework and cost estimate by Outcome, Output and Activity” on page 58.

Outcome	Outputs	Activity Description	Cost Estimate (USD)		
			GEF	Other	Total
Component 1: Capture and Containment of Obsolete Pesticide Stockpiles and Wastes					
Outcome 1.1 Removal of priority POPs pesticide waste from the Nubarashen burial site, secure containment of residual contamination on-site, site stabilization and restoration, with the site secured under appropriate institutional arrangements providing effective access limitations, monitoring and future land use control, all endorsed by an informed public.	1.1.1Design documentation, tender specification, implementation procedures to undertake the required works. 1.1.2 EHS procedures documented and promulgated in support of the works required. 1.1.3 EIA and Environmental Expertise approval to proceed with the works 1.1.4 Removal to secure storage of 900 t of pure pesticides and high concentration POPs wastes from the Nubarashen burial site 1.1.5 Removal to secure storage of 7,000 t of POPs pesticide waste in the form of highly contaminated soil from the Nubarashen burial site completed 1.1.6 Onsite secure containment of 12,000 t of low and moderately contaminated soil in an engineered landfill within the Nubarashen site in place. 1.1.7 Restoration and access control provisions for the Nubarashen burial site are in place and civil works to stabilize the surrounding land and drainage are completed. 1.1.8 Training delivered to 20 national technical and regulatory staff in support of Nubarashen operations. 1.1.9 5 public consultation events held and 10 public documents/web/media products delivered.	1.1.1 Detailed site assessment, clean-up design, geotechnical/hydrological stabilization design, EIA, permitting and tender document preparation for excavation/packaging/containment and site works supervision including on-site screening analysis capability for segregation of POPs pesticide waste categories.	225,000	710,500	935,500
		1.1.2 Installation of site access and safeguarding infrastructure for recovery and restoration activities	-	618,000	618,000
		1.1.3 Excavation, packaging and removal of OP burial cells and other associated priority POPs pesticide wastes involving estimated 900 t Category 1 POPs pesticide wastes (pure pesticides and POPs pesticide wastes >30% pure pesticides)	115,000	319,700	434,700
		1.1.4 Redistribution, segregation and initial containment of Category 2 and 3 soils		305,000	305,000
		1.1.5 Excavation, packaging and removal of 7,000 t Category 2 POPs wastes (high concentration soils using health risk criteria of > 1,500 ppm), packaging and removal	75,000	240,000	315,000
		1.1.6 On-Site final Containment of 12,700 t Category 3 POPs waste (< 1,500 ppm health risk criteria, >0.7 ppm agricultural risk criteria)	-	415,000	415,000
		1.1.7 Site restoration, undertaking area site geotechnical/hydrological stabilization, and drainage improvements. installation of monitoring and establishment of long term land use control arrangements	20,000	475,000	495,000
		1.1.8 Operational and safeguards training for hazardous waste and contaminated site management including site excavation, packaging and restoration operations – Estimated 20 national technical staff trained for work on site.	25,000	25,000	50,000
		1.1.9 Supporting public consultation for design, permitting, operational and restoration/monitoring phases of Nubarashen site work. Estimated 5 formal events held and 10 public documents/web/media products produced.	10,000	60,000	70,000
		Outcome 1.1 Total		470,000	3,168,200
Outcome 1.2: Development of the Kotayk national	1.2.1Design documentation, tender specification, implementation procedures to undertake the Kotayk HW facility site	1.2.1 Detailed design, EIA, permitting and tender development and construction supervision for the Kotayk HW facility site development	70,000	300,000	370,000

Outcome	Outputs	Activity Description	Cost Estimate (USD)		
			GEF	Other	Total
hazardous waste management site at equipped with secure storage and basic infrastructure to allow introduction of HW treatment soil remediation technologies constructed and operated for the secure storage of POPs pesticide waste and OP stockpiles, and the treatment of POPs pesticide contaminated soil.	development. 1.2.2 Applicable EHS procedures documented and promulgated in support of the works required. 1.2.3 EIA and Environmental Expertise approval to proceed with the Kotayk HW facility site development 1.2.4 Kotayk national HW management site developed to and operated to international standards. 1.2.5 Operation of the facility for the storage of 1050 t of POPs pesticide waste and OP stockpiles pending export for environmentally sound destruction. 1.2.6 Operation of the facility to host remediation technology treating 7.100 t of soil highly contaminated with POPs pesticide in an environmentally sound manner. 1.2.7 20 HW facility operational staff trained and equipped with respect HW management, safeguards and EHS practices. 1.2.8 5 public consultation events held and 10 public documents/web/media products delivered.	1.2.2 Storage Facility upgrading and construction works for indoor secure storage capacity for 1,100 t of Category 1 POPs pesticides and OPs from Nubarashen and OP storehouses, and covered external secure on-site storage of up to 7,100 t of highly contaminated soil (Category 2) from Nubarashen and OP storehouse clean ups	175,000	2,405,000	2,580,000
		1.2.3 Receiving storage and custody operations for Category 1 and Category 2 material received from Nubarashen and OP stockpiles from storehouses	-	300,000	300,000
		1.2.4 Technical and safeguards training for hazardous waste facility operation. Estimated 20 operational staff from MTAES or contracted service providers involved	20,000	50,000	70,000
		1.2.5 Supporting public consultation for design, permitting, and operational phases of Kotayk facility development. Estimated 5 formal events held and 10 public documents/web/media products produced.	10,000	30,000	40,000
	Outcome 1.2 Total		275,000	3,085,000	3,360,000
Outcome 1.3: Remaining significant historical OP storehouses have OP stocks packaged and removed for destruction and residual site contamination cleaned up.	1.3.1 Screening assessments completed/documented on 24 identified historical OP stockpile sites and 150 t of OP stockpiles and clean up residuals packaged and removed to the Kotayk HW facility. 1.3.2 Detailed contaminated site and risk assessments and remediation/clean up designs on 6 identified priority sites completed/documented 1.3.3 Excavation/removal, remediation and/or containment on 6 identified priority sites completed 1.3.4 6 public consultation events held at 6 priority sites and 10 public documents/web/media products delivered.	1.3.1 OP Storehouse screening assessments, stockpile packaging and surficial clean up and removal to the Kotayk storage facility (150 t of OP and clean up residuals from 24 sites) and export of 150 t for destruction	-	550,000	550,000
		1.3.2 Follow up detailed site assessment, clean up design, and supervision permitting on 6 priority sites identified during PPG but subject to results of Activity 1.3.1 above.	-	75,000	75,000
		1.3.3 Excavation/Removal, containment and/or remediation up to 200 t Category 2 and 3 contaminated soil of the 6 priority sites	-	200,000	200,000
		1.3.4 Supporting public consultation for design, permitting, and operational phases of clean ups under 1.3.2-1.3.3 on 6 priority sites. Estimated 6 formal events held and 10 public documents/web/media products produced	-	50,000	50,000
	Outcome 1.3 Total		-	875,000	875,000
Component 1 Totals			745,000	7,128,200	7,873,200

Outcome	Outputs	Activity Description	Cost Estimate (USD)		
			GEF	Other	Total
Component 2: Obsolete Pesticide Stockpile and Waste Elimination					
Outcome 2.1: Removal from Armenia of all substantially all high priority POPs pesticides, associate very high concentration wastes and OP stockpiles.	2.1.1 Export of 900 t of Category 1 POPs pesticides, priority POPs pesticide wastes, and OPs from the Kotayk facility for destruction in a qualified international facility	2.1.1 Export of 900 t of Category 1 POPs pesticides, priority POPs pesticide wastes, and OPs from the Kotayk facility for destruction in a qualified international facility	1,800,000	50,000	1,850,000
Outcome 2.2: Environmentally sound remediation of heavily POPs pesticide contaminated soil inclusive of destruction of extracted POPs pesticides demonstrated.	2.2.1 7,100 t of heavily contaminated POPs contaminated soil (POPs pesticide waste) remediated to levels below the low POPs content returned and contained on the Nubarashen site 2.2.2 Commercially viability of in-country remediation of POPs contaminated soil demonstrated 2.2.3 Operational training of 20 national technical personal on a modern contaminated soil technology	2.2.1 Environmentally sound remediation of 7,100 t of Category 2 POPs pesticide contaminated soil (7,000 t from Nubarashen and 100 t from 6 OP storage sites), involving the removal and destruction of residual POPs pesticide contaminants (to <50 ppm) at market selected soil remediation facilities either operated at the Koyatk site or a qualified facilities in another country.	1,590,000	5,550,000	7,140,000
Component 2 Total			3,390,000	5,600,000	8,990,000
Component 3: Institutional and Regulatory Capacity Strengthening for Sound Chemicals Management and Contaminated Site					
Outcome 3.1: Legal/regulatory and technical guidance tools for management of chemical wastes, including POPs, and, contaminated sites management within a national sound chemicals management framework strengthened	3.1.1:Policies, legislation and regulatory measures respecting hazardous chemical wastes and contaminated sites management reviewed, updated and appropraite revisions implemented	3.1.1 Rationalization, updating and revision of polices, legislation and guidelines covering hazardous chemicals waste and contaminated sites management	25,000	275,000	300,000
	3.1.2. Adopted technical guidelines on operational safety procedures for hazardous chemicals waste handling, transport, storage and disposal, developed in accordance with international practice and 50 relevant national personal trained	3.1.2 Preparation and adoption of technical guidelines on operational safety procedures for hazardous chemicals waste handling, transport, storage and disposal, developed in accordance with international practice, including national training.	25,000	284,384	309,384
	3.1.3 Guidance documentation on environmental and health risk assessment methodologies and practices applicable to hazardous waste stockpiles and contaminated sites developed in accoradnce with international practice introduced and adopted, and 50 professional trained.	3.1.3 Introduction of environmental and health risk assessment methodologies and practices applicable to hazardous waste stockpiles and contaminated sites developed in accoradnce with international practice inclusive of training training programs. . Estimated 18 institutinal, academic, industrial, private service provider and NGO professionals trained	25,000	200,000	225,000
Outcome 3.2: Technical/environmental	3.2.1 Qualification test burns undertaken based in international standards on the	3.2.1 Undertaking technical and environment performance assesment of the EcoProject incineration facility inclusive of an	100,000	2,830,000	2,930,000

Outcome	Outputs	Activity Description	Cost Estimate (USD)		
			GEF	Other	Total
performance evaluation and upgrading requirements for existing national destruction capability	EcoProject incineration facility to determine appropriate HW streams for its application. 3.2.2 Technical assessment produced defining upgrading and investment requirements for expanded application	international standard test burn on characteristic waste streams and a design assessment to define required upgrading requirements			
Outcome 3.3: Basic national capacity for effective hazardous chemicals sampling and analysis for multi-environmental media and contaminated sites in place, operational and certified to international standards	3.3.1 Adopted national strategy for rationalization and upgrading national laboratory capability to serve a sound chemoicals management framework including hazardous waste and contaminated sites management. 3.3.2 3 national laboratories, including one each in the regulatory, academic and private sector upgraded with suitable capability for hazardous chemical waste and contaminated site sampling and analysis 3.3.3 30 laboratory and associated personel training upgraded 3.3.4 3 laboratories with international certification and international methods and practice in place	3.3.1 Development of a national laboratory rationalization and optiminzation strategy	5,000	100,000	105,000
		3.3.2 Laboratory infrastructure and equipment upgrading as required to optimize national capacity	40,000	1,496,800	1,536,800
		3.3.3 3 Training of laboratory personal on site and multi-environmental media sampling, laboratory analysis and QA/OC procedures. Estimated 30 professional staff willll be trained	10,000	100,000	110,000
		3.3.4 International laboratory ceritification support for selected labs in accoradnce with the strategy. 3 designated national labortatories to be certified.	10,000	100,000	110,000
Component 3 Total			240,000	5,386,184	5,626,184
4.0 Project Monitoring and Evaluation			100,000	130,000	230,000
Sub-Total			4,475,000	18,244,384	22,719,384
Project Management Costs			225,000	1,040,000	1,265,000
Total Project Costs			4,700,000	19,284,384	23,984,384

Annex 10: MTR Rating Scales

As per UNDP-GEF guidance, the MTR Reviewer used the following scales to rate the project:

- A 6-point scale to rate the project's progress towards the objective and each project outcome as well as the Project Implementation and Adaptive Management: Highly Satisfactory (HS), Satisfactory (S), Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), or Highly Unsatisfactory (HU).
- A 4-point scale to rate the sustainability of project achievements: Likely (L), Moderately Likely (ML), Moderately Unlikely (MU), and Unlikely (U).

Ratings for Progress Towards Results: (one rating for each outcome and for the objective)		
6	Highly Satisfactory (HS)	The objective/outcome is expected to achieve or exceed all its end-of-project targets, without major shortcomings. The progress towards the objective/outcome can be presented as "good practice".
5	Satisfactory (S)	The objective/outcome is expected to achieve most of its end-of-project targets, with only minor shortcomings.
4	Moderately Satisfactory (MS)	The objective/outcome is expected to achieve most of its end-of-project targets but with significant shortcomings.
3	Moderately Unsatisfactory (HU)	The objective/outcome is expected to achieve its end-of-project targets with major shortcomings.
2	Unsatisfactory (U)	The objective/outcome is expected not to achieve most of its end-of-project targets.
1	Highly Unsatisfactory (HU)	The objective/outcome has failed to achieve its 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 11: Audit Trail

Section	Para. #	Comments to MTR	Evaluator's Response	Management response
Throughout doc.		Edits made in “track changes” throughout the report	Done and adjusted where needed.	
1.2	Conclusion c)	The PC has shared a Visio-based road map which on one page is visualizing all core activities with potential end dates, conditions for progress, and obstacles/risks.	No changes made. Acknowledge reviewing the Visio roadmap but the conclusion is about using a project management software to automatically identify the Critical Path and a quick and easy way to assess multiple scenario.	The effectiveness and efficiency of introducing the recommended software for automatic generation of a Critical Path will be communicated to the PMB, and based on the decision act respectively.
	Conclusion d)	Reference to the recently approval of Decree N383-A	Added as a footnote	No-comment
		Reference to total expenditures	No change. Kept the reference point as end of February 2018 to keep consistency throughout the analysis documented in the report and based on CDR reports.	Consultant's approach to count the total expenditure based the CDR report is accepted.
	Conclusion e)	In any case, there is a need to refer to the Government of Armenia commitment letter dated 05.09.2014 telling, that “ ..the Government of Armenia will ensure the provision of 16,002,000 USD (cash and in kind) as co-funding to the project”.	No changes made. The conclusion is here to state the clear fact that so far, no cash-co-financing is available.	Acceptable with reflection of a <u>cash</u> -financing element.
		The allocation of the Nairit storage site is approved by the GoA Decree N383-A, issued on 05 April 2018. Development of a storage under the MES operational supervision was identified as a national hazardous waste storage/management capacity (not only for the pesticides). In addition, the project has an alternative solution of establishing a temporary light construction storage near the Nubarashen site, and this is under the design currently.	Paragraph updated with this good news!	No-comment
After				

Section	Para. #	Comments to MTR	Evaluator's Response	Management response
		The clear route to the final destination for the Category 1 waste transportation will be identified after the selection of disposal plant. Due to geopolitical limitations (Turkey, Azerbaijan, Iran/GEF), the only feasible route is through Georgia and Black Sea. Armenia needs permits from all transit countries including Georgia. It's better to write here – Category 1 waste <u>transit permits</u> are not available yet. The permits will be received using the Basel Convention trans-boundary transit regulations/requirements, ahead of planned transportation.	No changes made. Agree with the comments but it is more for the management response. Technically, 2 routes exist and should be fully explored. It also depends on the government's position.	Conclusion is acceptable, potential waste transit routes will be fully explored.
	Conclusion f)	The PMB is granted a power of decision-making, manifested in the signed protocols. The issues/proposals needing PMB decision are technically complex. Even the experienced international consultants/companies are not in a strong technical position to propose definite single solutions for decision-making.	No changes made. Agree that PMB decision are complex but the PMB needs to be more in the “driving seat” of the project.	More efforts will be dedicated with changed co-chairs of the PMB to increase the “driving seat” of the PMB.
		The link with the Inter-Agency Commission on implementation of Stockholm Convention is coordinated/facilitated by the SC national focal point Mrs. Anahit Aleksandryan. In response to all her invitations, the PC have delivered reporting presentations to the committee (12.08.2016; 20.07.2017; 21.12.2017) or interim reporting materials were shared for her use/distribution. From 13 members of the committee, 6 members are also involved in the PMB or PAC of the project.	No changes made. Acknowledging the presentations on the project made at the IAC but the recommendation focuses on strengthening the link between the PMB and the IAC	The recommendation will be communicated with the MNP to the focal point of the IAC expecting their response and suggestion directed to strengthen the link between the PMB and the IAC.
		Clarify “... more distributed decision-making process is needed”	Sentence revised	No-comment
	Conclusion g)	Such statement should be true for all support to NIM projects. Three agencies: the MNP, MES and Government staff are executive agencies and being located in UNDP keeps the neutrality for the project.	No changes made. Being at UNDP brings a certain neutrality but also low visibility of the project and perception that it is “the UNDP project”.	UNDP officially requested the MNP to allocate a space in the MNP premises for the project office. Two options were proposed: one small no window and ventilation room in the Ministry's building and the other option was out of the Ministry's building in an abandoned premise requiring significant capital investments for physical upgrading. These options were not acceptable for the project's operation.

Section	Para. #	Comments to MTR	Evaluator's Response	Management response
	Conclusion h)	The project delivery for 2015-2017 is \$703,839. GL expenditure to date is 472,628.52 USD representing 10% of the total GEF project grant. I guess, commitments are included. The Evaluator refers only to what has been disbursed.	No change. Kept the reference point as end of February 2018 and based on CDR reports to keep consistency throughout the analysis documented in the report.	Consultant's approach to count the total expenditure based the CDR report is accepted.
		In-kind co-financing contribution is available. Cash co-financing is expected for the site clean-up works period. The exact amount of the budget gap will be identified having proposals for all site clean-up and waste disposal works.	Added "cash-co-financing" in conclusion h)	No-comment
		The Annex 5 of the DOA stating the Conditionality clauses applying to the project implementation also suggests engagement of a qualified international technical/project management consultant reporting to UNDP (UNDP-Armenia with regular interaction to MPU/Chemicals to track developments) to advise and support detailed planning and initial procurement activities. Due to misbehavior as a tender evaluation panel member, the contracted international adviser was dismissed from the project, and the conditionality under this position is also outdated	No change made. It is not a critical point in this conclusion that is focusing on the condition of getting cash co-financing or stop the project.	The MTR conclusion is relevant.
	Conclusion i)	See respective comment above. Having in mind that \$703,839 is already delivered, the DOA USD 3,996,161 (85%) is remaining To date, project balance is 4,227,371.48 USD	No changes made. The conclusion is based on numbers supported by CDR reports to End of February 2018.	Consultant's approach to count the total expenditure based the CDR report is accepted.

Section	Para. #	Comments to MTR	Evaluator's Response	Management response
	Conclusion k)	<p>Maksim, your comments are important on this. I disagree to spend time now for reviewing the indicators and targets.</p> <p>UNDP Standard progress reports (SPRs) are not long and clearly state the targeted activities to achieve the outputs. PIR has certain format and requirement to fill in. The Section D is bulky because of large number of Outputs and Indicators under each.</p> <p>As per UNDP-GEF guidance, it is recommended to keep number of indicators down to 15. It is possible to review PRF matrix in PIR so as to make it more transparent, but this needs to be done soon (May, perhaps June) if the changes are to be reflected in this year's PIR. Regarding Prodoc PRF, it is possible to modify PRF in Prodoc but these changes must be approved by Project Board meeting. I will be happy to provide more guidance.</p>	No changes made. Comments are part of the management response.	The recommendation is accepted and a relevant revision will be done to update the Project Results Framework.
	Conclusion l)	<p>The site is identified and approved by the GOA Decree.</p> <p>Reference to a permit to transit Category 1.</p>	<p>Paragraph updated to reflect the recent approved Decree.</p> <p>No changes made. No reference to permit was made in the risk analysis in the project document</p>	No-comment
1.3	Recommendation 1	<p>The waste disposal works may be completed by the end of 2020. The project will need a closure period by the end of April 2021.</p> <p>As mentioned previously, as per UNDP-GEF extension rules, it is possible to extend project by 18 months, which takes us to November 2020. For longer extension, a strong justification needs to be provided and yet, there is no guarantee it will be granted.</p> <p>Maximum extension time for GEF-5 projects is 18 months so if extended, the project shall come to its end by 26 November 2020. For longer extension, a strong justification needs to be provided and yet, it is not certain the longer extension will be granted.</p>	Recommended extension changed to November 26, 2020	No-comment

Section	Para. #	Comments to MTR	Evaluator's Response	Management response
	Recommendation 2	The new site is approved by the GoA Decree. As an alternative/reserve solution the project has included a design then development of a light construction temporary storage near Nubarashen site. Such storage is required for the interim portions of re-packed material. Developing enough large (around 1,200 sq.m), it can serve for the temporary storage of entire repacked material, before transportations to final disposal). Then this storage can be transferred to the close located community.	Paragraph adapted with the recently approved Decree.	No-comment
		Please specify the high-level here, suggesting the PM/Government level. The Ministerial level is high but will not be an expected decisive contributor.	Added at Ministerial level if possible.	The recommendation is acceptable.
		Such document may be developed having the site clean-up/disposal technologies/services selected, which will advise on the budget and timing of all necessary works. Theoretical estimates exist, but the road map will depend on the country of disposal and on the type of technology selected for the Category 2 waste treatment on-site.	No changes made. Comments are part of the management response.	The recommendation is under consideration.
		I wonder if it's still acting? This committee is not assigned with a decision-making and executive role.	Change to "... PMB <u>in collaboration</u> with the IAC"	No-comment
	Recommendation 3	Three stakeholders have an executive role in the project management board – the MNP/MES/Government, and the project is in an ongoing/as needed communication with them, via electronic post for sharing document, by telephone conversations and direct in person meetings to discuss issues/proposals.	No changes made. This executive role needs to be formalized and used to keep the PMB in the “driving seat” guiding the project.	The recommendation complies with the PMB structure and stakeholder roles, and will be communicated to PMB.

Section	Para. #	Comments to MTR	Evaluator's Response	Management response
	Recommendation 4	<p>The nominated members of the Inter-Agency Committee from the MES, MoFA, MoH, NGO, MoA are involved in the PMB or PAC, in addition in the PAC there are members (other persons) from the Ministry of Defense, Police, MNP, Yerevan Municipality. Most of the PMB members have higher positions (three deputy Ministers, Yerevan Deputy Mayor, Deputy Head of Rescue Service in the MES) than the members of the Inter-Agency Committee members – few of them are involved in the project advisory committee members as technical specialists rather than high level decision makers. There is no Deputy Minister's level member in this committee.</p> <p>Per the PD <i>"The Project Management Board (PMB) is a continuation of the IAC mechanism"</i>.</p> <p>During the years 2016-2017 the project was invited and delivered three presentations at the committee sessions - 12.08.2016, 20.07.2017, 21.12.2017; and shared brief project status updates on 21.03.2016, 30.09.2016, 29.11.2016, 07.07.2017, 05.12.2017</p> <p>As above – the PMB members have higher decision maker status.</p>	<p>No changes made. One advantage of the IAC is that it is a national Committee formed for overseeing the implementation of a national programme. It is part of the government's instrument to tackle POPs issues. Keeping a strong link between the PMB and the IAC will only help the implementation of this project; increasing the project's visibility within the government.</p>	<p>The recommendation will be communicated to the IAC focal point at the MNP and agree what additional reporting or communicating mechanism-channel can be applied to improve the coordination.</p>
	Recommendation 5	<p>The cash component can be clearly identified based on tender proposals.</p> <p>After 18 months the DOA conditionalities were expired and the document was not reviewed-updated. It need to be updated as a standard UNDP-GWF DOA</p> <p>"review and update" means to re-issue DOA. Very unlikely.</p> <p>Reviewing and updating DOA means re-issuing DOA which is very unlikely. If any text, in the conditionality clause, has become obsolete, required changes shall be discussed at and approved by Project Board Meeting, and captured by PB meeting minutes, duly signed off.</p>	<p>No changes made. Agree with comments to discuss changes needed to this DOA within the PMB. This is part of the management response.</p> <p>No reference is made to a qualified international technical consultant since one is in place, replacing the first one selected.</p>	<p>The recommendation to update the DOA will be again communicated to the RTA's office, and act respectively per RTA's advice and in compliance with UNDP and GEF procedures.</p>

Section	Para. #	Comments to MTR	Evaluator's Response	Management response
	Recommendation 6	This can be an option during the no-cost extension period, if relevant space will be offered.	No changes made. Being located within a government department would increase the visibility of the project.	Shifting now the project office to any governing institution building is not reasonable. Worth mentioning that even the originally proposed spaces are now not available. However, the project's visibility will be more focused.
	Recommendation 7	In case Project Result Framework is to be restructured (trimming the number of indicators), these changes shall be discussed at and approved by Project Board Meeting, and captured by PB meeting minutes I am not sure what is Maksim's stance, but I think bringing the number of indicators down to 15 (maximum) as recommended by UNDP-GEF would be beneficial. It is a quite standard process.	No changes made. Agree with comments and part of management response.	The recommendation is accepted and the Project Results Framework will be updated.
	Recommendation 8	Even international experts don't provide and explicit advice on the options of Category 2 waste treatment. The Project's focus is POPs pesticides only, chemicals management is a very large area. The proposed monthly frequency is very often, preferably a quarterly info sharing could be established, which almost happens, but the idea of regular updating is acceptable.	Paragraph revised to focus on POPs and communication to be monthly or quarterly.	The recommendation to use quarterly information sharing with the PMB is acceptable.
	Recommendation 10	Recommendation 10: Please reflect the impact of force major for the project created by the recent political situation (Velvet Revolution) in Armenia See the attached material for your awareness.	No changes made/Recommendation not added. This event happened after the MTR and it is also impossible to assess what could be the impact on the project in the near and medium term.	No comment.
2	#2	The obsolete pesticide storehouses don't contain industrial chemicals.	Removed sentence; not related to the MTR.	No comment.

Section	Para. #	Comments to MTR	Evaluator's Response	Management response
4.2.1	Table 5, row Outcome 3.3	<p>In process</p> <p>On 23-25 August, 2017 "Soil Sampling and Lab QA/AC Training" was delivered (under Task 10 of the TOR) by DEKONTA trainers, both in classroom and on-site (2-day theoretical training and 1-day practical training on-site at Nubarashen burial site), to 29 participants (15 women, 14 men), representing various national laboratories and relevant institutional units (MNP EIMC merged laboratory, NAS Institute of Chemical Physics, "STANDARD DIALOG" LLC private laboratory, MPH NCDC "Reference Lab Center" SNCO, MNP, MES, ENGO). Should be marked with yellow color.</p>	Reference to training workshop was added as delivered but no change to the overall progress within the current timeframe. However, agree that with the time extension these activities should be completed.	No comment.
4.3.1	#83	Inaccurate. DOA delegates authority to UNDP Res. Rep. to sign prodoc on behalf of UNDP.	Revised sentence.	No comment.
	#85	The proposed review/roadmap shall be agreed upon at Project Board Meeting and its approval shall be captured in duly signed Project Board Meeting minutes.	No changes made; indeed agree with the statement.	No comment.
4.3.3	#93	Currently, disbursement stands at \$44,275 accounting for 9.7% of 2018 budget	No changes made. Kept financial figures as of the end of February 2018 and based on the CDR reports.	No comment.

Annex 12: Evaluation Report Clearance Form


EVALUATION REPORT CLEARANCE FORM

for the Mid-Term Evaluation Report of the UNDP-GEF-Government of Armenia Project:
"Elimination of obsolete pesticide stockpiles and addressing POPs contaminated sites within a
Sound Chemicals Management Framework in Armenia"
(PIMS 4905)

Evaluation Report Reviewed and Cleared by

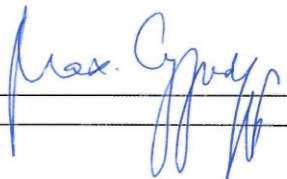
UNDP Country Office

Name: Dmitry MARININ, DRR

Signature:  Date: 29.06.2018

UNDP RTA

Name: Maksim Suskov, MPU-Chemicals
RTA

Signature:  Date: 28.06.2018