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TERMINAL EVALUATION

UNDP-SUPPORTED GEF-FINANCED PROJECT

NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan

Atlas Business Unit, Award 00071893

GEF Project ID 9PIMS) 4612

UNDP Project ID 4442

Zharas Takenov, Almaty, Kazakhstan 23 August 2017

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LIST OF ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
ADR	International Carriage of Dangerous Goods by Road
APR	Annual Project Review
AWP	Annual Workplan
BDE	Bromodiphenvl ether
BEP/BAT	Best Environmental Practice / Best Available Techniques
BTOR	Back to Office Report
CO	UNDP Country Office
CEO	Chief Executive Officer
CSO	Civil Society organization
CISC	Closed Joint Stock Company
CLIM	Climate Laws Institutions and Measures
EA	Executing Agency
EIA	Environmental International Agreements
FU	Furopean Union
EBRD	European Bank for Reconstruction and Development
EAEU	European Bank for Reconstruction and Development
EurAsEC	EurAsian Economic Community
ECIASEC	Eul Asian Economic Community
FGD	Focus Group Discussions
FR	Facebook
FAO	Food and Agriculture Organization of the United Nations
CDP	Gross Domestic Product
CEE	Clobal Environment Escility
CHC	Greenbouse Geses
CHS	Clobally Harmonized System of Classification and Labelling of Chamicals
CoV	Covernment of the Depublic of Kezelshaten
COST	Stote Standard
	State Statuaru
ПОО	Hexablonooiphenyi
ПСП	Hexachiolocyclonexane (Inidane)
HC W	Healthcare Waste Management
HC W M	Heatmare waste Management
	Headquarter
IBKD	International Bank for Reconstruction and Development
IDB	Islamic Development Bank
IHCW	Infectious Healthcare waste
	The Internet includes E and
IMF	I ne international Monetary Fund
INC	Intergovernmental Negotiation Committee
ISWA	International Solid Waste Association
KZI LDC	Kazakh Tenge
LDCs	Least Developed Countries
LogFrame	Logical Framework Matrix
Ltd	Limited Liability Company
MEAs	Multilateral Environmental Agreements
MEP	Ministry of Environmental Protection
MoA	Ministry of Agriculture
MoH	Ministry of Health of the Republic of Kazakhstan
MSW	Municipal Solid Waste
MINT	Ministry of Industry and New Technologies of the Republic of Kazakhstan
MID	Ministry of Investments and Development of the Republic of Kazakhstan
MEMR	Ministry of Energy and Mineral resources of Republic of Kazakhstan
MEBP	Ministry of Economy and Budget Planning of the Republic of Kazakhstan
MTE	Mid-Term Evaluation
M&E	Monitoring and Evaluation

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	I erminal Evaluation of UNDP-supported GEF-Jinanced Project "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan"
MDG	Millennium Development Goal
NGO	Non-Governmental Organization
NEX	Nationally Executed
NIP	National Implementation Plan for the Stockholm Convention
OJSC	Open Joint Stock Company
ProDoc	Project Document
PIF	Project Information Form
PRF	Project Results Framework
PIMS	Project Information Management System (UNDP GEF)
PIR	Project Implementation Review
PPP	Public Private Partnership
PM	Project Manager
PB	Project Board
PCDD/Fs	Dioxins and furans
PFOs	Perfluorooctane Sulphonate
PIC	Prior Informed Consent
PIU	Project Implementation Unit
PCB	Polychlorinated by phenils
POPs	Persistent Organic Pollutants
PPE	Personal protective equipment
PSE REM	Public Service Enterprise with the right of economic management
RCU	Regional Coordinating Unit
RECETOX	Research Centre for Toxic Compounds in the Environment
RK	Republic of Kazakhstan
RTA	Regional Technical Advisor
SAICM	Strategic Approach for International Chemicals Management
SC	Stockholm Convention
SDS	Safety Data Sheets
SESC	Sanitary and Epidemiological Surveillance Committee
SIDS	Small Island Developing States
SCO	The Shanghai Cooperation Organization
SSIs	Small Scale Incinerators
SMART	Specific, Measurable, Assignable, Realistic and Time-related (indicators)
SWM	Solid Waste Management
TBD	To Be Determined
TOR	Terms of Reference
TRAC	Target for Resource Assignments from the Core
UN	United Nations
UNOPS	United Nations Organization for Project Services
USEPA	The United States Environmental Protection Agency
uPOPs	Unintentionally Produced Persistent Organic Pollutants
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
WB	The World Bank
WHO	World Health Organization
WP	Work Program/Plan
WTO	World Trade Organization
ZD	Zhasyl Damu

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ACKNOWLEDGEMENTS

The author of the Terminal Evaluation (TE) Report would like to express his gratitude to all project stakeholders with whom he has met during the terminal evaluation mission in Kazakhstan from 10 July - 21 July 2017 and who generously provided their views and opinions on project results and impacts.

The author expresses his special thanks to Ms. Nina Gor, Project Manager, project team members: Assel Shakhanova (Expert on HealthCare Waste and Mercury Pollution Management) and Saltanat Bayeshova (Project Expert, Capacity Building in the field of Persistent Organic Pollutants), Ms. Victoria Baigazina, Programme Associate of SDU Unit, Project Supervisor, UNDP CO as well as to all interviewed parties in Astana, Kostanay and Ust-Kamenogorsk, who provided all requested information and valuable inputs for the project evaluation during the terminal evaluation mission. The cooperation with the project team and all project partners was effective, and the evaluator received all requested information.

Terminal Evaluation of UNDP-supported GEF-financed Project "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan"

1A. EXECUTIVE SUMMARY

This report describes the findings, conclusions, recommendations and lessons learned of the Terminal Evaluation (TE) of the UNDP-supported GEF-financed Full-Sized Project "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan, PIMS 4612 (The Project)". This is a four-year project launched on 22 October 2013 and carried out by the UNDP Country Office in Astana, Kazakhstan until its end by 30 September 2017. The evaluation was conducted by an independent international consultant. The evaluation mission to East-Kazakhstan region, Kostanay and Astana took place from 10 July to 21 July 2017. The purpose of the TE is to provide the management (Project Implementation Group, UNDP in Kazakhstan Country Office and at the level of UNDP/GEF) with the options on more effective and efficient achievement of the Project deliverables and their dissemination.

From 2003 to 2006, the Government of Kazakhstan implemented its first POPs project entitled "Assistance to Kazakhstan in Fulfilling its Commitments Under the Stockholm Convention of Persistent Organic Pollutants" with the financial support of the GEF and technical support provided by UNDP. As part of this project an action plan formulated and Kazakhstan's first National Implementation Plan (NIP) prepared. In 2009 Kazakhstan has submitted its National Implementation Plan (NIP) to the Secretariat for the Stockholm Convention on POPs, in which the new POPs and the unintended produced POPs (uPOPs) were not considered. To address this, the Government of Kazakhstan and UNDP formulated a project proposal entitled "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan" (The Project).

Table 1 Project Summery of UNDP supported CEF financed project "NIP undeta integration of POPs into national

planning and promoting sound healthcare waste management in Kazakhstan"								
Project NIP	NIP update, integration of POPs into national planning and promoting sound healthcare waste management in							
GEF Project I	Ittle: Kazakhstan GEF Project ID: #4442 #4442 US\$)							
UNDP Proje I	ct 00085149 (PIMS D: #4612) 00071893 (Atlas ID)	GEF financing:	3,40	00,000	3,400,000			
Countr	V: Kazakhstan	IA/EA own:						
Regio	Region: RBEC/CA Government: 34,315,820		315,820	34,315,820				
		UNDP:	75,000		75,000			
		UNDP (in-kind):	100,000		100,000			
Focal Are	a: Persistent Organic Pollutants CHEM-1, 3, 4	Other:	521,938		521,938			
FA Objective (OP/SI	s,):	Total co-financing:	35,0	012,758	35,012,758			
Execution Agence	g /:	Total Project Cost:	38,4	412,758	38,412,758			
Other Partne	TS Ministry of Energy of	ProDoc Signature (date project began):			22.10.2013			
	RK	(Operational) Closing D	nal) Closing Date: Proposed: 30.09.2017		Actual: 30.09.2017			

The essentials of the evaluated project are present in the following Table 1:

"NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan" The Project preparation phase including development and approval of the Project Document (ProDoc) lasted 2 years (end of 2010-2012). The Project was approved in February 2012 with a planned duration of four (4) years (September 2013 – September 2017). The full project budget is 38.4 million USD, with contribution of GEF of 3.4 million USD.

The ProDoc was signed on October 2013. Project execution was through UNDP CO and the Government of Kazakhstan involving on initial stages the Ministry of Environmental Protection (MEP), which later became the Ministry of Environment and Water Recourses (MEWR), and on the final stages the Ministry of Energy (MoE). The four-year full-size project was planned to be completed by September 30, 2017. The Project implementation started in April 2014 (signing of the ProDoc by all parties in October 2013).

The direct **Objective** of The Project is reducing emission levels of unintentional released persistent organic pollutants (uPOPs) and other pollutants in the environment by promoting sound healthcare waste management (HCWM) in Kazakhstan; and assisting the country in implementing commitments in the framework of the Stockholm convention.

The Project is designed along four (4) components:

- 1. The first component relates to **updating national implementation plan** for the commitments under the Stockholm convention in the part of new and uPOPs, increase POPs monitoring capability, and improving institutional coordination of Intergovernmental Negotiation Committee (INC) on chemicals.
- 2. The second component aims to **assess a mercury situation** in general to prepare recommendations on accession to the Minamata convention and draft preliminary plan on reduction of mercury use.
- 3. The third component plans to conduct activities in order **to minimize emissions of uPOPs** when decontaminating healthcare waste. It also includes a creation and demonstration of the safe healthcare waste management system in pilot territories. As pilots, the following territories have been selected: East-Kazakhstan and Kostanay regions and the city of Astana.
- 4. The fourth component includes monitoring, education, adaptation and feedback.

The Project achieved the following outcomes results under each component:

Outcome 1:

The National Implementation Plan (NIP) was updated on new POPs and on uPOPs. A comprehensive assessment of the legal framework is available and recommendations to the relevant Governmental body provided. The coordination on chemical MEAs is handed over to Zhasyl Damu which is part of the Ministry of Energy. Due to the intersectoral approach of the Multilateral Environmental Agreements (MEAs) implementation Zhasyl Damu needs further comprehensive legal competencies to fulfill the duties on intersectoral level. Overall POPs regular inventory mechanism is not yet completely developed due to insufficient laboratory capacity, standards for reporting, and deficient sampling data. At the same time, interviewed organizations and the Government expressed clear intentions to include POPs into national monitoring system of hazardous chemicals. This will naturally take longer than a project lifetime, due to reasons that are beyond the Project's mandate and capacity. It is anticipated that Zhasyl Damu Information Center will serve as a central data base for statistics, technical reports, and Environmental International Agreements (EIA) related documents. A significant achievement in the implementation period is introduction of amendments to the Environmental Code regarding establishing standard emissions of dioxins and furans.

Two laboratories for accreditation were identified in the East-Kazakhstan and North-Kazakhstan branches of the RSE "Kazhydromet". Recommendations for accreditation of laboratories have been prepared. Since at present the expansion of the field of laboratory accreditation for dioxins and furans is not possible due to

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"NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan" the lack of expensive highly sensitive equipment, the laboratory of East Kazakhstan has carried out activities to prepare the accreditation of the laboratory for other POPs-POPs pesticides (Alfa - HCCH, 4,4-DDE, 4,4-DDD, 4,4-DDT), the analysis of which is possible on the currently available equipment.

Jointly with the United Chemical Company LLP (branch of Samruk Kazyna), negotiations are underway to establish a Center for Chemical Safety based on Nazarbayev University, which includes funding for the identification of the entire spectrum of POPs and uPOPs. On request of United Chemical Company LLP, a technical specification for the laboratory equipment of this Center was developed by the Project. By September 2017, it is expected that United Chemical Company LLP, would purchase laboratory equipment with subsequent accreditation.

Outcome 2:

The ProDoc stipulated that the Component 2 to be jointly carried by UNDP and UNEP. The UNEP's part was expected to be financed by GEF as well. However, due to adoption of the Minamata Convention on 10 October 2013, GEF's eligibility criteria have changed and allowed to finance mercury focused projects in countries that are signatories of¹ the Convention only. Therefore, UNEP's regional project on mercury, including Kazakhstan, Belarus and Russia, had been put on hold. Although it was no longer expected that the organization will be able to implement it within time frame of this Project lifespan.

The work on total mercury assessment, that has been carried out in accordance with the methodology, prepared by UNEP, aimed at achieving the goal of adopting a decision on signing the Minamata Convention by the country. An agreement to refuse the use of mercury thermometers in the healthcare system has been signed with the health authorities of RK in the pilot regions. The introduction into the legislation of the Republic at the end of 2015 of the principle of "extended producer obligations" and the inclusion, with the direct participation of the Project in 2016 of mercury-containing lamps and thermometers, in the List of Products (Goods) to which it is distributed will prevent formation and solve the problem of collecting and processing mercury waste. Plan for Reducing the Use and Collection of Mercury was developed and submitted to the Ministry of Energy for final approval. The Project provided expert support for the inclusion of the Minamata Convention in the Perspective Plan for Concluding International Treaties of the Republic of Kazakhstan for 2017-2019. This means that the country plans to ratify the Minamata Convention and the Project can be credit for this. The implementation of the new UNDP-GEF Project "Initial Assessment of Minamata for Kazakhstan", signed in July 2017, will help in resolving this issue.

Outcome 3:

There was a large variety of the activities related to public awareness raising and training on the management of POPs, medical waste and state procurement for different audiences including scientists, NGOs and professionals.

The process of selection of pilot regions was initiated at the Inception Workshop by the Project Manager who informed participants about possibility to apply for co-operation. Right after the Workshop, an official letter was distributed to regions on behalf of MEWR. The deadline for expression of interest by local authorities was set to May 27, 2014. Selected regions were announced by the end of May, and an initial visit to them conducted in June 2014. According to the Minutes of Project board dated 29 May 2014 three regions were selected for outcome 3 implementation – East-Kazakhstan and Kostanay region, Astana city. Memorandums of Understanding of the pilot project implementation were signed with the local government authorities of the selected regions.

Also, hospitals were selected in the mentioned regions (in total 8: 2 in Astana city and 3 in the each of other two regions) to conduct a baseline assessment of healthcare waste management. Also, national consultants of selected regions collecting data for analysis and assessment over the regions in the field of HCW handling.

¹ UNDP supported and GEF financed project "Minamata Initial Assessment for Kazakhstan" was signed in July 2017 by UNDP CO and the Government of RK.

To reduce emissions of mercury 18,042 mercury-contained thermometers have been replaced for electronic ones in healthcare facilities of the pilot regions. Although during MTE in 2016 the reduction of POPs by the usage of non-burn technology was assessed as behind the schedule the Project Team could try and complete the work of installation of non-burn technology equipment and commissioning it by July 2017.

Outcome 4:

The Project fully complies with reporting cycle and tools as required by UNDP-GEF guidance and reflected in the ProDoc. Apart from progress reporting to National Project Director (NPD) and GEF, the Project used the mandate of the Steering Committee to communicate its results within key governmental institutions and other stakeholders and to adapt to unexpected change in selected pilot hospitals and centers over the project course.

The evaluator reviewed 3 PIRs for 2015, 2016 and 2017 (draft) and found that they provide concise information on project progress, management, and achievements and prove success in reaching multiple stakeholders and beneficiaries over the project implementation. Two PIRs for 2015 and 2016 were rated as satisfactory with risk rating changed down from "high" in 2015 to "low" in 2016 mainly due to efficient risk monitoring and adaptive actions of the project team. Draft of the last PIR for 2017 was under consideration by GEF at the time of TE.

The following Conclusions are presented in the TE report:

- 1. The UNDP-supported GEF-financed Full-Sized Project "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan (PIMS 4612) has been implemented efficiently and expected to be closed in due time scheduled for September 2017. UNDP made a great effort by assigning the office staff and financial resources to support the Project implementation from 2013-2017. The disbursement rate of the GEF resources as of 17 July 2017 is 92%. The Total Project budget and work plan includes US\$ 38,412,758, of which GEF resources accounts for 3,400,000 US\$(8.9%), 75,000 US\$ of UNDP TRAC and US\$ 34,837,758 cofinanced by city governments (Akimats) and healthcare entities and NGOs (90%). The main disbursements were done in procurement area, thus in Outcome 3 - the contractual services make up for 72.7%, in the Outcome 1 – the contractual services make up 13%, and expenses in the Outcome 2 - make up 6.4% and in the Outcome 4 - the M&E work make up 5.4%. All expenditures are committed. Based on the evidence available (mission reports, purchase orders, descriptions of training events) the Evaluator concludes that the outputs have been delivered as reported and 100% disbursements of GEF grant and 78% of co-financing disbursements will be reached by September 2017. Although co-financing from the side of RK partners, as Governmental and private sector, in national currency, was delivered in full volume. Due to the sudden devaluation of KZT in condition to the beginning and to the end of the Project to two times, amount of co-financing in US Dollars was decreased. As a general appreciation, the procured goods and services are of good value. The Evaluator has observed that the procured installed non-burn technology equipment agrees with their purpose.
- 2. The Evaluator found the local counterparts and the UNDP Country Office highly committed to the Project. The Evaluator observed constructive working relations between the UNDP and the key national counterparts.
- 3. As for the implementing partner, it appears that excellent inter-relationships were established between the three parties, PMU, UNDP CO and MoE, as observed during this TE. Throughout this process, the essential functions of the national implementing partner continued without interruption. Notably, key committees and departments dealing with chemical management continued to respond

essentially to the same chain of command. Following internal changes in the Government the same person Ms. Bizara Dosmakova served throughout the project lifespan since April 2014 until its end as National Project Director (NPD) on behalf of MEP, MEWP and MoE. Therefore, at the level of personnel as well as the agency itself, communication between project staff and the NPD also remained steady throughout the whole project period, within and outside business hours.

- 4. The Project has achieved all the anticipated outcomes contributing to uPOPs issues and mercury recycling as The Project's assistance to the country in fulfilling Kazakhstan's commitments under the Basel, Rotterdam and Stockholm Convention and in the end the Project deserves credits for these great results.
- 5. The Project did directly affect the preparation of POP inventory through research and stakeholder outreach during the implementation period of the Project. Furthermore, the Project played a big role in advocacy through its work on regulations and standards, support for laboratories certification and accreditation, and promotion among public. The Project deserves credit for design and implementation of the pilot projects on installation non-burn technologies and introduction replacement mechanism of mercury-containing thermometers in 3 areas of Kazakhstan. The certified laboratories should be properly equipped and completely functional with qualified technical staff to work on dioxides and furans. The Project assisting the KAZGIDROMET and United Chemical Company LLP to identify relevant specifications and find funding for the laboratory equipment and capacity building of the laboratory staff.
- 6. Through its workshops, conferences, dissemination of trainings the Project directly communicated to executive authorities on medical waste management choice solutions. More broadly, the Project's promotional efforts among public reached big number of relevant stakeholders with focused messaging on uPOPs issues, new non-burn technologies and mercury recycling that they would have difficulty to receive without organized effort by a knowledgeable team.
- 7. The ProDoc was signed on October 22, 2013 within three months since the receipt of official communication from the GEF Secretariat. Timing of the Inception Workshop has been delayed by six months due to process of hiring of relevant national project manager and project staff. The Project had some delays in implementation of its activities due to different internal and external factors affecting the speed and included: procurement delays and frequent government restructuring. In addition, the slow implementation of Outcome 3 was observed through unexpected changes of the place for equipment installation in the pilot territories, which required additional work on determination the new installation places and conducting long negotiation processes with local governments and key partners as well as and formalizing new agreements.
- 8. Promoting successful pilot projects results through broad awareness campaigns is an important precondition for project sustainability and replication. The Project accompanied with a wide raising awareness campaign and implemented by the Project in 2013-2017. Completion of installation and commissioning of 10 non-burn equipment in eight (8) pilot project areas by end of the Project's lifespan limits possibility for proper monitoring of practical demonstration of the new non-burn technologies and therefore limits sharing results of the pilots.
- 9. By the end of the Project it became clear that low prices of old combustion technologies for healthcare medical waste management is a main risk for further promotion of good quality non-burn technologies in Kazakhstan as the State Procurement regulations were based on principles of cost minimization, fair competition, transparency, and support of domestic suppliers, but not include reduction of uPOPs or environmental cost.

- "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan"
- 10. The Project enabled reduction of uPOPs in Kazakhstan and generated useful learning experiences attracting interest of private investments for introduction of new technologies for medical waste management projects which can serve as input not only in Kazakhstan but also for future all UNDP-supported GEF-financed project in area uPOPs reduction. The possibility of sharing The Project experience on the regional level has a good framework since for years Kazakhstan has been providing official development and humanitarian assistance, helping various countries in the Central Asian region and beyond. To strengthen its role as an emerging donor, Kazakhstan wants to systematize and professionalize its efforts and align ODA with the priorities of its foreign policy. The MFA is partnering with UNDP in designing and elaborating its development cooperation. The cooperation project aims to support MFA RK to establish a national ODA agency. Through expert support the project provides the analysis of the best international experience and situation of the ODA new donors, shows common threats and problems and ways to solve them effectively.
- 11. In the project design, there is a lack of information broken down by gender—both quantitative data and qualitative information although the development challenge of hazardous medical wastes management have gender-related dimensions.

The list below summarizes the main Recommendations for the UNDP Kazakhstan CO future programming:

- 1. UNDP CO should introduce post-project monitoring of operation and use of the Project's equipment in the all pilot areas within one-two years after the Project closer.
- 2. It is recommended considering joining forces with central and local Government agencies, private companies and business associations, UN agencies, international donors and NGOs for promotion of changes in the laws/regulations in the country to allow better promotion of business involvement for introduction of new non-burn technologies through Private Public Partnership (PPP) programmes/mechanisms.
- It is recommended to expedite work on supporting the existed National Association of Waste Management (KazWeste)² to insure sustainability in promotion of new Best Environmental Practice / Best Available Techniques (BEP/BAT) for medical waste reduction and recycling in Kazakhstan.
- 4. It is recommended to continue assistance to the Government in accelerating its work for determining the national requirements and needs for the ratification of the Minamata Convention and building national capacity, establishing structures and practices to undertake future work towards the implementation of the Minamata Convention in coordination with existed work on the Stockholm, Basel and Rotterdam Conventions under the new UNDP-supported GEF-financed project "Minamata Initial Assessment for Kazakhstan".
- 5. It is recommended that future project/s pay more attention to address gender dimensions aspects in the design of activities as well as engagement of women, recognizing their role as stakeholders regarding hazardous waste management aspects in the country. Professional training and public outreach should be designed with a special eye toward both gender equity and responsiveness to gender-specific issues. It is also important to note mandatory Annex on Gender Mainstreaming Analysis and Action Plan for future GEF projects.

² Association KazWeste unites more than 35 organization and enterprises working in waste management. The Association was created in 2013 and accredited by Ministry of Energy, Investments and Development. The KazWeste is a member of the Committee of Green Economy of the Association of Enterprises Atameken and an official member of International Solid Waste Association (ISWA).

- 6. UNDP CO could recommend the MFA RK to consider of the Project's results in the Kazakhstan ODA recipient countries in Afghanistan, Tajikistan and Kyrgyzstan and involvement of GEF RBEC/RBAP and UNDP COs in respective countries to ensure smooth and successful replication process to achieve global chemical security benefits.
- 7. It is recommended to consider the above recommendations while implementing the new UNDPsupported GEF-financed project "Minamata Initial Assessment for Kazakhstan", planned from 2017-2019 in Kazakhstan.

The Evaluator has identified the following Lessons that can be drawn from the Project:

- 1. Establishing a close collaboration early-on with similar projects in other countries, with similar socio-economic conditions, is an effective and efficient way to learn from the experiences and challenges that others have faced while providing support and advice to projects that are at an earlier implementation phase. The Project worked closely with similar project in the Kyrgyz Republic.
- 2. Providing assistance on accreditation and advising on modern and highly sensitive equipment for the existed testing laboratories in the East-Kazakhstan and North-Kazakhstan branches of the RSE "Kazhydromet" is a fundamental condition to create the necessary technical basis to ensure the required high-level control of dioxins and furans as well as other POPS and POPs-pesticides (Alfa-HCCH, 4,4-DDE, 4,4-DDD, 4,4-DDT), the analysis of which is possible with the available equipment. The Project provided recommendations for accreditation of laboratories. The Project also could support national laboratories through arranging transferring knowledge of testing procedures and improved required skills to create a viable network of certifying laboratories.
- 3. Keeping close monitoring over new emerging non-burn technologies may contribute to the project benefits. The Project has implemented the new non-burn technologies for the attention of public, business, healthcare entities, local health authorities etc. and proved the potential of replication of the new non-burn technology for improving HCWM and reduction of emotions of u-POPs.
- 4. Promoting successful pilot projects results through broad awareness campaigns is an important precondition for project sustainability and replication. In case of the Project, the installation of the pilot projects was significantly delayed. Therefore, the Project was not able to benefit from assessing and evaluation of project results.
- 5. Generating useful learning experiences which may serve as input for future UNDP and GEF programming not only in Kazakhstan but for whole Central Asian region. Therefore, the capacity of The Project staff of capturing lessons on regular basis and documenting the collected information from different formal and informal sources is very important for its improving through monitoring, available training and mentoring from UNDP CO side.
- 6. Finding of innovative and creative approaches through analyzing the legislative framework for possible co-financing by local partners can contribute to projects' financial sustainability. The implementation of pilot projects allowed to learn that local Akimats are receiving funding from the central government and they do not have flexibility to support financially replication of the pilot projects. In would be valuable to consider projects supported through establishing of joint ventures with private sector where Akimats had only part of ownership and can utilize current PPP mechanisms. Without promoting this type of cooperation, it will remain difficult for local authorities to get an access to funding from private sector.

"NP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan"
7. Developing of mercury thermometers utilization system by The Project is a way to ensure environmental benefits of The Project. Regardless the good progress of mercury thermometers collection and replacement by electronic thermometers the Project could consider the impact of other mercury contained medical equipment, general appliances used in the medical organizations and as well as mercury lamps. As it was recognized through another UNDP supported and GEF financed Lighting Efficiency Project implementation the mercury lamps are still imported in a big amount. Within the period from 2012 to 2016 there were 53.8 million mercury lamps imported into the country. In addition, the Project should be aware that after certain time the replacement of the electronic thermometers will be an issue as an electronic waste.

- 8. Participating in regional events might be a potential to consider results and experience received during the Project implementation for development a project idea on biosafety in Kazakhstan or in the Central Asian Region. The project team took part in the regional conference "The Future of Biosafety and Biosecurity in Central Asia, Afghanistan and further countries from the region approaches, achievements and challenges, held in October in Bishkek.
- 9. Creating and regular updating rosters of potential national managers of GEF and non-GEF projects, evaluators and experts on different relevant subjects within all planned interventions of UNDP CO in Kazakhstan can drastically expedite implementation of UNDP projects.
- 10. Management training for national staff engaged in the UNDP projects' implementation should be mandatory and it need to be annually updated and reviewed by responsible units' staff with possible certification of the received skills and knowledge.

Table 2. Evaluation Ratings: UNDP-supported GEF-financed Full-Sized Project "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan"				
1. Monitoring and Evaluation ³	rating	2. IA& EA Execution ⁴	rating	
M&E design at entry	S	Quality of UNDP Implementation	S	
M&E Plan Implementation	S	Quality of Execution - Executing Agency	S	
Overall quality of M&E	MS	Overall quality of Implementation / Execution	S	
3. Assessment of Outcomes ⁵	rating	4. Sustainability ⁶	rating	
Relevance ⁷	R	Financial resources	ML	
Effectiveness	S	Socio-political	ML	
Efficiency	S	Institutional framework and governance	ML	

The Table 2 below is summarizing all required terminal evaluation ratings:

³ Using a six-point rating scale: 6: Highly Satisfactory (HS), 5: Satisfactory (S), 4: Marginally Satisfactory (MS), 3: Marginally Unsatisfactory (MU), 2: Unsatisfactory (U) and 1: Highly Unsatisfactory (HU)

⁴ Using a six-point rating scale: 6: Highly Satisfactory (HS), 5: Satisfactory (S), 4: Marginally Satisfactory (MS), 3: Marginally Unsatisfactory (MU), 2: Unsatisfactory (U) and 1: Highly Unsatisfactory (HU)

⁵ Using a six-point rating scale: 6: Highly Satisfactory (HS), 5: Satisfactory (S), 4: Marginally Satisfactory (MS), 3: Marginally Unsatisfactory (MU), 2: Unsatisfactory (U) and 1: Highly Unsatisfactory (HU)

⁶ Using a four-point rating scale: Likely (L); Moderately Likely (ML); Moderately Unlikely (MU); Unlikely (U)

⁷ Relevance rating scale: Relevant (R); Not Relevant (NR).

Terminal Evaluation of UNDP-supported GEF-financed Project "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan"

Overall Project Outcome Rating	S	Environmental	ML
		Overall likelihood of sustainability	ML

1B. EXECUTIVE SUMMARY (RUSSIAN) ПОЯСНИТЕЛЬНАЯ ЗАПИСКА

Настоящий отчет описывает результаты, выводы, рекомендации и извлеченные уроки, полученные в результате заключительной оценки (3O) полномасштабного проекта «Обновление Национального плана выполнения, интеграция управления стойкими органическими загрязнителями (CO3) в процесс национального планирования и рационального управления медицинскими отходами в Казахстане», PIMS 4612 (далее - Проект)», выполнявшегося при поддержке ПРООН и финансировании ГЭФ. Это четырехлетний проект, который начался 22 октября 2013 года и осуществлялся Казахстанским офисом ПРООН в Астане до его окончания 30 сентября 2017 года. Оценка проводилась независимым международным консультантом. Миссия по оценке в Восточно-Казахстанскую область, Костанай и Астану проходила с 10 июля по 21 июля 2017 года. Целью ЗО является предоставление руководству (Группе реализации проекта, страновому офису ПРООН в Казахстане и ПРООН/ГЭФ) рекомендаций для более действенного и эффективного достижения результатов Проекта и их распространения.

С 2003 по 2006 год Правительство Казахстана осуществляло свой первый проект по СОЗ под названием «Помощь Казахстану в выполнении своих обязательств в рамках Стокгольмской конвенции о стойких органических загрязнителях» при финансовой поддержке ГЭФ и технической поддержке, оказываемой ПРООН. В рамках этого проекта был составлен план действий и подготовлен первый в Казахстане Национальный план выполнения (НПВ). В 2009 году Казахстан представил Национальный план выполнения (НПВ) в Секретариат Стокгольмской конвенции о СОЗ, в которой новые СОЗ и непреднамеренно производимые СОЗ (НСОЗ) не рассматривались. Для решения этого вопроса правительство Казахстана и ПРООН разработали проектное предложение «Обновление НПВ, интеграция управления СОЗ в процесс национального планирования и рационального управления медицинскими отходами в Казахстане» (далее - Проект).

Таблица 1. Резюме	Проекта при поллержи		EDA ((06					
Таблица 1. Резюме Проекта при поддержке ПРООН и финансировании ГЭФ "Обновление Национального плана выполнения, интеграция управления стойкими органическими загрязнителями в процесс национального управления медицинскими отходами в Казахстане"								
Назван ие Проект а: Обновлен загрязнит отходами	Обновление Национального плана выполнения, интеграция управления стойкими органическими загрязнителями в процесс национального планирования и рационального управления медицинскими отходами в Казахстане							
ID Проекта ГЭФ: [#]	ŧ4442		<u>при утверждении</u> (мил.доллар США)	<u>при завершении</u> <u>(мил.доллар США)</u>				
ID Проекта 00085149 (PIMS Финансирование ГЭФ: 3,400,000 ПРООН: #4612) 00071893 (Atlas ID) 3,400,000 3,400,000								
Страна: К	Казахстан	Исполнительное агентство/ведущее агентство:						
Регион: RBEC/CA		Правительство:	34,315,820	34,315,820				
		Правительство:	75,000	75,000				
		ПРООН (неденежный):	100,000	100,000				
Основное С направление: о	Стойкие органические	Другое:	521,938	521,938				

Основы оцениваемого проекта представлены в Таблице 1:

Terminal Evaluation of UNDP-supported GEF-financed Project

	загрязнители СНЕМ-				
	1, 3, 4				
Задачи ФА,		Итого, совместное	25	010 750	35,012,758
(ОП/СП):		финансирование:	35,0	012,758	
Организация-		Итого, затраты	38 112 758		38,412,758
исполнитель:		проекта:	50,	412,750	
Другие		Подписание Проектного	о док	хумента (дата начала	22 10 2013
участники:	Министерство			проекта):	22.10.2013
	энергетики РК	(Рабочая) Дата закрыт	ия:	Предлагаемая:	Фактическая:
				30.09.2017	30.09.2017

Фаза подготовки Проекта, включая разработку и утверждение Проектного документа (ПроДок), длилась 2 года (конец 2010-2012 годов). Проект был утвержден в феврале 2012 года с запланированной продолжительностью в четыре (4) года (с сентября 2013 года по сентябрь 2017 года). Полный бюджет проекта составляет 38,4 млн. долларов США, при этом вклад ГЭФ составляет 3,4 млн. Долларов США.

ПроДок был подписан в октябре 2013 года. Реализация проекта осуществлялась через страновой офис ПРООН и правительство Казахстана, с участием на начальных этапах Министерства охраны окружающей среды (МОС), которое впоследствии стало Министерством окружающей среды и водных ресурсов (МОСВР), а затем Министерством энергетики (МЭ). Планировалось завершить четырехлетний полномасштабный проект к 30 сентября 2017 года. Реализация проекта началась в апреле 2014 года (подписание ПроДок всеми сторонами состоялось в октябре 2013 года).

Непосредственной целью Проекта является сокращение уровней выбросов, непреднамеренно высвобождаемых стойких органических загрязнителей (НСОЗ) и других загрязняющих веществ в окружающую среду путем содействия рациональному управлению медицинскими отходами (УМО) в Казахстане; а также оказание содействия стране в выполнении ее обязательств в рамках Стокгольмской конвенции.

Проект разработан по четырем (4) компонентам:

- 1. Первый компонент связан с обновлением национального плана выполнения обязательств по Стокгольмской конвенции в части новых и НСОЗ, повышения потенциала мониторинга СОЗ и улучшения институциональной координации Межправительственного комитета по переговорам (МКП) по химическим веществам.
- 2. Второй компонент направлен на **оценку** в целом **ситуации с ртутью** по подготовке рекомендаций относительно присоединения к Минаматской Конвенции и проекта предварительного плана по сокращению использования ртути.
- 3. В третьем компоненте планируется проводить мероприятия с целью минимизации выбросов HCO3 при дезактивации медицинских отходов. Он также включает создание и демонстрацию безопасной системы управления медицинскими отходами на пилотных территориях. В качестве пилотных территорий были выбраны следующие регионы: Восточно-Казахстанская и Костанайская области и город Астана.
- 4. Четвертый компонент включает мониторинг, образование, внедрение и обратную связь.

Проект достиг следующих результатов по каждому компоненту:

Результат 1:

Национальный план выполнения (НПВ) был обновлен в отношении новых СОЗ и НСОЗ. Имеется всеобъемлющая оценка правовых рамок и предлагаются рекомендации соответствующему правительственному органу. Координация по химическим Многосторонним природоохранным соглашениям (МПС) передается Жасыл Даму, который является частью Министерства энергетики. В связи с межсекторальным подходом к реализации Многосторонних природоохранных соглашений (МПС) Жасыл Даму необходимы дополнительные всеобъемлющие юридические компетенции для выполнения обязанностей на межсекторальном уровне. Общий механизм инвентаризации СОЗ еще не полностью разработан из-за недостаточного лабораторного потенциала, стандартов отчетности и недостаточных данных по выборке. В то же время опрошенные организации и представители госорганов выразили четкие намерения включить СОЗ в национальную систему мониторинга опасных химических веществ. Это, естественно, займет больше времени, чем срок действия самого Проекта, ввиду причин, которые выходят за рамки мандата и потенциала Проекта. Предполагается, что Информационный центр Жасыл Даму будет являться центральной базой данных для статистических, технических отчетов и документов, относящихся К международным природоохранным соглашениям (МПС). Значительным достижением в период реализации является внесение поправок в Экологический кодекс в отношении установления стандаров выбросов диоксинов и фуранов.

В Восточно-Казахстанском и Северо-Казахстанском филиалах РГП «Казгидромет» были определены две лаборатории для аккредитации. Подготовлены рекомендации по аккредитации лабораторий. Поскольку в настоящее время расширение сферы лабораторной аккредитации для диоксинов и фуранов невозможно из-за отсутствия дорогостоящего высокочувствительного оборудования, лаборатория Восточного Казахстана провела мероприятия по подготовке аккредитации лаборатории для других пестицидов СОЗ-СОЗ (Alfa - HCCH, 4,4-DDE, 4,4-DDD, 4,4-DDT), анализ которых возможен на имеющемся в настоящее время оборудовании.

Совместно с ТОО «Объединенная химическая компания» (филиал «Самрук-Казына») ведутся переговоры о создании Центра химической безопасности на базе Университета имени Назарбаева, которые включают вопросы финансирования для идентификации всего спектра СОЗ и НСОЗ. По запросу ТОО «Объединенная химическая компания» Проектом была разработана техническая спецификация для лабораторного оборудования этого Центра. К сентябрю 2017 года ожидается, что ТОО «Объединенная химическая компания» закупит лабораторное оборудование с последующей аккредитацией.

Результат 2:

В ПроДок предусматривадось, что Компонент 2 будет осуществляться совместно ПРООН и ЮНЕП. Ожидалось, что часть ЮНЕП будет финансироваться также ГЭФ. Однако в связи с принятием Минаматской Конвенции 19 января 2013 года критерии отбора ГЭФ изменились и они позволяют финансировать проекты по ртути, только в странах, подписавших Конвенцию. Следовательно, региональный проект ЮНЕП по ртути, который включал Казахстан, Беларусь и Россию, был приостановлен. И уже не ожидалось, что организация сможет реализовать его в сроки, предусмотренные для срока действия данного Проекта.

Оценка общей ситуации с ртутью, которая была проведена в соответствии с методологией, подготовленной ЮНЕП, была направлена на достижение цели принятия решения о подписании страной Минаматской Конвенций. В пилотных регионах было подписано соглашение об отказе от использования ртутных термометров в системе здравоохранения с органами здравоохранения РК. Внедрение в законодательство Республики в конце 2015 года принципа «расширенных обязательств производителей» и включение с прямым участием Проекта в 2016 году ртутьсодержащих ламп и

"NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan" термометров в Перечень Продуктов (Товаров), на которые он распространяется, предотвратит образование и решает проблему сбора и переработки ртутных отходов. План по сокращению использования и сбора ртути был разработан и представлен Министерству энергетики для окончательного утверждения. Проект оказал экспертную поддержку включению Конвенции Минамата в Перспективный план заключения международных договоров Республики Казахстан на 2017-2019 годы. Это означает, что страна планирует ратифицировать Минаматскую Конвенцию, и проект может быть признателен за это. Исполнение нового проекта ПРООН-ГЭФ «Первоначальная оценка Минаматской Конвенции для Казахстана», подписанного в июле 2017 года, поможет в решении этой проблемы.

Результат 3:

Было проведено большое количество разнообразных мероприятий, связанных с повышением осведомленности общественности и обучением управлению СОЗ, медицинскими отходами и государственными закупками для различных аудиторий, включая ученых, НПО и специалистов.

Процесс отбора пилотных регионов был инициирован на Начальном семинаре руководителем проекта, который проинформировал участников о возможности подачи заявки на сотрудничество. Сразу после семинара среди регионов было распространено официальное письмо от имени МОСВР. Крайний срок для выражения заинтересованности со стороны местных властей был установлен 27 мая 2014 года. Выбранные регионы были объявлены к концу мая, а первоначальный визит в них был совершен в июне 2014 года. Согласно протоколу Совета по проекту от 29 мая 2014 года три Региона были выбраны для реализации 3-го этапа – Восточно-Казахстанская и Костанайская области, а также город Астана. С местными органами власти выбранных регионов были подписаны меморандумы о взаимопонимании по реализации пилотного проекта.

Кроме того, в указанных регионах были отобраны больницы (всего 8: 2 в городе Астане и 3 в каждом из двух других регионов) для проведения базовой оценки управления медицинскими отходами. Кроме того, национальные консультанты отобранных регионов собирают данные для анализа и оценки по регионам в области обращения с медицинскими отходами (МО).

Для сокращения выбросов ртути в медицинских учреждениях пилотных регионов 18.042 ртутных термометра были заменены на электронные. Хотя во время среднесрочной оценки проекта (СОП) в 2016 году сокращение количества СОЗ за счет использования технологии, не связанной со сжиганием, отставало от графика, проектная группа сумела завершить работу по установке оборудования, применяющего такую технологию, и ввести его в эксплуатацию до июля 2017 года.

Результат 4:

Проект полностью соответствует циклу и инструментам отчетности, как того требует руководство ПРООН-ГЭФ и, как это отражено в ПроДок. Помимо отчета о проделанной работе, представляемого Национальному директору проекта (НДП) и ГЭФ, проект использовал мандат Руководящего комитета для представления своих результатов ключевым правительственным учреждениям и другим заинтересованным сторонам, а также для адаптации к неожиданным изменениям в отдельных пилотных больницах и центрах во время реализации проекта.

Оценщик рассмотрел 3 отчета реализации проекта (ОРП) за 2015, 2016 и 2017 годы (план) и обнаружил, что они предоставляют краткую информацию о ходе реализации проекта, управлении и достижениях и подтверждают действенность обращения к нескольким заинтересованным сторонам и бенефициарам в ходе реализации проекта. Два ОРП за 2015 и 2016 годы были оценены как удовлетворительные с рейтингом риска, который был снижен с «высокого» в 2015 году до «низкого» в 2016 году, в основном за счет эффективного мониторинга рисков и адаптивных действий проектной группы. Проект последнего ОРП за 2017 год находился в процессе рассмотрения ГЭФ во время проведения ЗО.

Следующие заключения представлены в отчете ЗО:

- 1. Поддерживаемый ПРООН и финансируемый ГЭФ полномасштабный проект «Обновление Национального плана выполнения, интеграция управления стойкими органическими загрязнителями в процесс национального планирования и рационального управления медицинскими отходами в Казахстане» (PIMS 4612) был эффективно реализован и ожидается, что он будет завершен в назначенное время, а именно в сентябре 2017 года. ПРООН приложила огромные усилия, назначив исполняющий персонал и распределив финансовые ресурсы для поддержки реализации Проекта с 2013-2017 гг. Расход ресурсов ГЭФ по состоянию на 17 июля 2017 года составляет 92%. Общий бюджет проекта и рабочий план составляют 38.412.758 долл. США, из которых ресурсы ГЭФ составляют 3.400.000 долл. США (8,9%), 75.000 долл. США – ПРООН ТКАС и 34.837.758 долл. США – совместное финансирование co стороны правительств городов (Акиматов), организаций здравоохранения и НПО (90%). Основные ресурсы были потрачены на закупки, поэтому в Результате 3 контрактные услуги составляют 72,7%, в Результате 1 контрактные услуги составляют 13%, расходы в Результате 2 составляют 6,4%, а в Результате 4 стоимость работ по мониторингу и оценке составляет 5,4%. Все выделенные средства на обязательные затраты освоены. Основываясь на имеющихся данных (отчеты о миссиях, заказы на поставку, описания учебных мероприятий), Оценщик приходит к выводу, что итоги соответствуют заявленным результатам и, что к сентябрю 2017 года будет выделено 100% выплат грантов ГЭФ и 98% со-финансирования. Положительная оценка дана высокому качеству приобретенных товаров и услуг. Оценщик отметил, что закупленное установленное оборудование, применяющее технологию, не связанную со сжиганием, соответствует назначению.
- 2. Оценщик пришел к выводу, что местные партнеры и страновой офис ПРООН проявляют высокую приверженность Проекту. Оценщик отметил конструктивные рабочие отношения между ПРООН и ключевыми национальными партнерами.
- 3. Что касается партнера-исполнителя, то, очевидно, что между тремя сторонами, Проектной группой, ПРООН и Министерством энергетики были установлены отличные взаимоотношения, которые наблюдались в ходе этой ЗО. На протяжении всего процесса основные функции национального партнера-исполнителя непрерывно исполнялись. Примечательно, что ключевые комитеты и отделы, занимающиеся управлением химическими веществами, находились в одной вертикали подчинения. После внутренних изменений в правительстве на протяжении всего срока действия проекта с апреля 2014 года до его окончания один и тот же человек г-жа Бизара Досмакова работала в качестве Национального директора проекта (НДП) от лица МООС, МОСВР и МЭ. Поэтому как на уровне персонала, так и на уровне самого агентства, как в рабочее, так и во вне рабочего времени связь между персоналом проекта и НДП также оставалась неизменной на протяжении всего времени реализации Проекта.
- 4. Проект достиг всех ожидаемых результатов, способствующих решению вопросов НСОЗ и утилизации ртути, в области выполнения обязательств Казахстана в рамках Базельской, Роттердамской и Стокгольмской конвенций, и в конечном итоге Проект заслуживает признания за достигнутый грандиозный успех.

- 5. Проект оказал непосредственное влияние на подготовку инвентаризации СОЗ путем проведения исследований и охвата заинтересованных сторон в течение периода реализации Проекта. Кроме того, Проект сыграл важную роль в освещении проблемы в рамках работ по регламентам и стандартам, поддержке сертификации и аккредитации лабораторий, а также продвижению вопроса в общественность. Проект заслуживает высокой оценки за разработку и реализацию пилотных проектов по внедрению технологии, не связанной со сжиганием, и механизма замены ртутных термометров в трех областях Казахстана. Сертифицированные лаборатории должны быть надлежащим образом оборудованы и должны располагать квалифицированным техническим персоналом для работы с диоксидами и фуранами. Проект оказал помощь РГП «Казгидромет» и ТОО «Объединенная химическая компания» в определении соответствующей спецификации и в поиске финансирования для приобретения лабораторий.
- 6. На семинарах, конференциях и тренингах Проект имел прямой контакт с органами исполнительной власти по вопросам выбора решений для управления медицинскими отходами. В более широком плане усилия Проекта по пропаганде проблематики среди общественности увенчались успехом, заключающимся в привлечении большого числа заинтересованных сторон по вопросам НСОЗ, новым технологиям, не связанным со сжиганием, и переработки ртути, о чем им было бы трудно получить информацию без организованных усилий квалифицированной команды.
- 7. ПроДок был подписан 22 октября 2013 года по истечении трех месяцев с момента получения официального сообщения от Секретариата ГЭФ. Сроки проведения Начального семинара были отложены на шесть месяцев по причине поиска и найма соответствующего национального менеджера и персонала проекта. Проект столкнулся с некоторыми задержками ввиду различных внутренних и внешних факторов, влияющих на скорость реализации, включая задержки с закупками и частое государственное реструктурирование. Кроме того, медленное внедрение Результата 3 имело место по причине неожиданных изменений места установки оборудования на пилотных территориях, что потребовало дополнительной работы по определению новых мест установки и проведению длительных переговорных процессов с местными органами власти и ключевыми партнерами, а также оформление новых соглашений.
- 8. Пропаганда успешных результатов реализации пилотных проектов посредством проведения широких информационных кампаний является важным предварительным условием для устойчивости и воспроизведения проекта. Проект сопровождался широкомасштабной информационно-пропагандистской кампанией в 2013-2017 годах. Завершение же установки и ввод в эксплуатацию всех 8 пилотных проектов к концу срока действия Проекта ограничивает распространение результатов пилотных проектов и мониторинг практической демонстрации новых технологий, не связанных со сжиганием. Завершение монтажа и ввода в эксплуатацию 10 не использующих сжигание устройств в восьми (8) пилотных проектных зонах к концу срока действия Проекта позволит обеспечить надлежащий мониторинг практической демонстрации новых технологий, не связанных с сжиганием, и, следовательно, ограничивает распространение результатов пилотов.

- 9. К концу реализации Проекта стало ясно, что дешевизна старых технологий сжигания медицинских отходов представляет основной риск для дальнейшего продвижения качественных технологий, не связанных со сжиганием, в Казахстане, поскольку государственные правила закупок основаны на принципах минимизации затрат, честной конкуренции, прозрачности и поддержки отечественных поставщиков, и не затрагивают проблематику сокращения НСОЗ или экологических последствий.
- 10. Проект позволил сократить НСОЗ в Казахстане и создать полезный опыт привлечения частных инвестиций для внедрения новых технологий в рамках проектов управления медицинскими отходами, опыта, который может быть использован не только в Казахстане, но и в рамках всех будущих проектов по сокращению НСОЗ при поддержке ПРООН и финансировании ГЭФ. Возможность совместного использования полученного опыта на региональном уровне вполне обоснована, поскольку на протяжении многих лет Казахстан оказывал официальную помощь в области развития (ОПР) и гуманитарную помощь, поддерживая различные страны региона Центральной Азии и за ее пределами. Для усиления своих позиций в качестве нового донора Казахстан демонстрирует желание систематизировать и повысить профессионализм своих усилий, а также согласовать ОПР с приоритетами своей внешней политики. МИД сотрудничает с ПРООН в области развития. Проект сотрудничества направлен на оказание поддержки МИД РК в создании национального агентства ОПР. Благодаря экспертной поддержке Проект обеспечивает анализ лучшего международного опыта и ситуации с новыми донорами ОПР, уделяя внимание общим угрозам и проблемам, а также способам их эффективного решения.
- 11. Структура Проекта характеризуется недостатком информации с разбивкой по признаку пола как количественной, так и качественной, хотя проблема разработки управления опасными медицинскими отходами имеет гендерные аспекты.

В приведенном ниже списке представлены основные рекомендации для будущих программ ПРООН в Казахстане:

- 1. ПРООН должна осуществлять после-проектный мониторинг эксплуатации и результатов использования оборудования Проекта во всех пилотных регионах в течение одного-двух лет после завершения Проекта.
- 2. Рекомендуется рассмотреть возможность объединения усилий с центральными и местными правительственными учреждениями, частными компаниями и бизнес-ассоциациями, агентствами ООН, международными донорами и НПО для содействия изменениям в законодательстве / нормативных актах в стране, чтобы обеспечить более эффективное привлечение бизнеса во внедрение новых технологий, не связанных со сжиганием, через программы / механизмы государственно-частного партнерства (ГЧП).
- 3. Рекомендуется ускорить работу по поддержке существующей Национальной ассоциации по обращению с отходами (KazWeste)⁸, чтобы обеспечить устойчивость в продвижении новой

⁸ Ассоциация KazWeste объединяет более 35 организаций и предприятий, работающих в сфере управления отходами. Ассоциация была создана в 2013 году и аккредитована Министерством энергетики, инвестиций и развития. KazWeste

"NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan" наилучшей экологической деятельности / наилучших доступных технологий (НЭД / НДТ) для сокращения и переработки медицинских отходов в Казахстане.

- 4. Рекомендуется продолжать оказывать помощь правительству в ускорении его работы по определению национальных потребностей в деле ратификации Минаматской Конвенции и работы по наращиванию национального потенциала, созданию структур и практик для осуществления Минаматской Конвенции в координации с существующей работой по Стокгольмской, Базельской и Роттердамской конвенциям в рамках нового проекта «Первоначальная оценка Минаматской Конвенции для Казахстана» при поддержке ПРООН и финансировании ГЭФ
- 5. Рекомендуется в рамках реализации будущих проектов при разработке мероприятий уделять больше внимания рассмотрению гендерных аспектов, а также привлекать женщин, признавая их роль заинтересованных сторон в аспектах управления опасными отходами в стране. Профессиональная подготовка и общественная деятельность должны осуществляться с особым вниманием к гендерному равенству и реагированию на гендерные проблемы. Также важно отметить наличие в будущих проектах ГЭФ обязательного Приложения, посвященного анализу гендерных аспектов и плана действий.
- 6. ПРООН могла бы рекомендовать МИД РК учесть результаты Проекта для Афганистана, Таджикистана и Кыргызстана – стран получателях помощи ОПР Казахстана, а также использовать в соответствующих странах НЭД/НДТ ГЭФ и ПРООН для обеспечения повторения результатов и достижения глобальной химической безопасности.
- 7. Рекомендуется рассмотреть вышеупомянутые предписания при реализации нового финансируемого ГЭФ проекта «Первоначальная оценка Минаматской Конвенции для Казахстана», запланированного на 2017-2019 годы в Казахстане.

Оценщик определил следующие полученные в рамках настоящего Проекта уроки

- 1. Установление тесного сотрудничества на раннем этапе с аналогичными проектами в других странах с похожими социально-экономическими условиями является эффективным способом изучения опыта и проблем, с которыми сталкиваются другие при оказании поддержки и оказания консультаций проектам, которые находятся на более раннем этапе реализации. Проект тесно сотрудничал с аналогичным проектом в Кыргызской Республике.
- 2. Предоставление помощи по аккредитации и консультированию по современному и высокочувствительному оборудованию существующим испытательным лабораториям в Восточно-Казахстанском и Северо-Казахстанском филиалах РГП «Казгидромет» является фундаментальным условием создания необходимой технической базы для обеспечения требуемого высокого уровня контроля диоксинов и фуранов, а также других СОЗ и СОЗ-пестицидов (Alfa-HCCH, 4,4-DDE, 4,4-DDD, 4,4-DDT), анализ которых возможен на имеющемся в настоящее время оборудовании. Проект предоставил рекомендации по

является членом Комитета зеленой экономики Ассоциации предприятий Атамекен и официальным членом Международной ассоциации по твердым отходам (МАТО).

аккредитации лабораторий. Проект также мог бы поддерживать национальные лаборатории путем организации передачи знаний о процедурах тестирования и повышения необходимых навыков для создания функционирующей сети сертифицирующих лабораторий.

- 3. Поддержание контроля над появлением новых технологий, не связанных со сжиганием, может способствовать повышению эффективности проекта. Проект внедрил такие новые технологии, которые были оценены общественностью, бизнесом, организациями здравоохранения, местными органами здравоохранения и т. д., и доказал возможность тиражирования новых технологий, не связанных со сжиганием, для улучшения управления медицинскими отходами и снижения HCO3.
- 4. Содействие успешным результатам пилотных проектов посредством проведения широких информационно-пропагандистских кампаний является важным предварительным условием для устойчивости и воспроизведения проекта. В случае настоящего Проекта реализация пилотных проектов столкнулась со значительной задержкой. Поэтому Проект не смог извлечь пользу из оценки результатов проекта.
- 5. Извлечение полезного опыта может стать вкладом в будущие программы ПРООН и ГЭФ не только в Казахстане, но и во всем регионе Центральной Азии. Поэтому способность персонала Проекта на регулярной основе извлекать уроки и документировать информацию, собранную из различных официальных и неофициальных источников, очень важна в плане совершенствования посредством мониторинга, подготовки и наставничества со стороны ПРООН.
- 6. Поиск инновационных и творческих подходов путем анализа законодательной базы и определения возможностей со-финансирования со стороны местных партнеров может способствовать финансовой устойчивости проектов. Реализация пилотных проектов позволила узнать, что местные акиматы получают финансирование от центрального правительства, и они не обладают необходимой гибкостью для поддержки финансового тиражирования пилотных проектов. Было бы полезно рассмотреть возможность создания совместных предприятий с частным сектором с частичным участием акиматов с использованием существующих механизмов ГЧП. Не поощряя такого рода сотрудничество, местным властям будет трудно получить доступ к финансированию из частного сектора.
- 7. Разработка в рамках Проекта системы утилизации ртутных термометров обеспечивает экологическую устойчивость Проекта. Независимо от положительного прогресса в области сбора и замены ртутных термометров электронными, Проект мог бы рассмотреть влияние других ртуть содержащих медицинских изделий и приборов, используемых в медицинских организациях, а также ртутные лампы. Как было признано в рамках проекта по повышению эффективности освещения при поддержке ПРООН и финансировании ГЭФ, ртутные лампы по-прежнему импортируются в Казахстан в большом количестве. В период с 2012 по 2016 год в страну было импортировано 53,8 млн. ртутных ламп. Кроме того, проект должен учесть тот факт, что по истечении определенного времени замена электронных термометров станет проблемой по утилизации электронных отходов.

- 8. Участие в региональных мероприятиях может рассматриваться как возможность для изучения результатов и опыта, полученных в ходе реализации Проекта, для разработки проектной идеи по биобезопасности в Казахстане или в Центральноазиатском регионе. Команда Проекта приняла участие в региональной конференции «Будущее биобезопасности в Центральной Азии, Афганистане и других странах региона - подходы, достижения и проблемы», которая состоялась в октябре в Бишкеке.
- 9. Создание и регулярное обновление списков потенциальных национальных менеджеров проектов ГЭФ и не-ГЭФ, оценщиков и экспертов по различным соответствующим темам в рамках всех запланированных мероприятий ПРООН в Казахстане может значительно ускорить реализацию проектов ПРООН.
- 10. Подготовка управленческих кадров для национального персонала, участвующего в реализации проектов ПРООН, должна быть обязательной, и ее необходимо ежегодно актуализировать и анализировать сотрудниками ответственных подразделений странового офиса ПРООН с возможной сертификацией полученных навыков и знаний.

В приведенной ниже Таблице 2 суммированы все критерии финальной оценки:

Таблица 2. Финальная оценка: Проект при поддержке ПРООН и финансировании ГЭФ "Обновление											
Национального	пл	ана вы	полнен	ія, і	интег	рация	управле	ния	стойкими	орг	аническими
загрязнителями	В	процесс	наци)налы	ного	плани	рования	И	рационально)ГО	управления
медицинскими от	ход	ами в Ка	вахстане	"							
					1						

1. Мониторинг и оценка ⁹	оценка	2. Реализация и исполнение ¹⁰	оценка
М&О структуры в начале	Х	Качество реализации ПРООН	Х
М&О Плана реализации	Х	Качество исполнения - исполнительное агентство	Х
М&О общего качества	НУ	Общее качество реализации / исполнения	Х
3. Оценка результатов ¹¹	оценка	4. Устойчивость ¹²	оценка
Соответствие ¹³	С	Финансовые ресурсы	ВУ
Эффективность	Х	Социально-политические условия	ВУ
Продуктивность	Х	Организационная структура и управление	ВУ
Общая оценка результатов Проекта	X	Окружающая среда	ВУ
		Общая вероятность устойчивости	ВУ

⁹ Используя шестизначную оценочную шкалу: 6: Отлично (О), 5: Хорошо (Х), 4: Удовлетворительно (У), 3: Недостаточно удовлетворительно (НУ), 2: Неудовлетворительно (Н) и 1: Очень неудовлетворительно (ОН) ¹⁰ Используя шестизначную оценочную шкалу: 6: Отлично (О), 5: Хорошо (Х), 4: Удовлетворительно (У), 3: Недостаточно

удовлетворительно (НУ), 2: Неудовлетворительно (Н) и 1: Очень неудовлетворительно (ОН) ¹¹ Используя шестизначную оценочную шкалу: 6: Отлично (О), 5: Хорошо (Х), 4: Удовлетворительно (У), 3: Недостаточно

удовлетворительно (НУ), 2: Неудовлетворительно (Н) и 1: Очень неудовлетворительно (ОН) ¹² Используя четырехзначную оценочную шкалу: Устойчиво (У); Возможно устойчиво (ВУ); Возможно неустойчиво (ВН); Неустойчиво (Н)

¹³ Шкала оценки соответствия: Соответствует (С); Не соответствует (НС)

2. INTRODUCTION

From 2003 to 2006, the Government of Kazakhstan implemented its first POPs project entitled "Assistance to Kazakhstan in Fulfilling its Commitments Under the Stockholm Convention of Persistent Organic Pollutants" with the financial support of the GEF and technical support provided by UNDP. As part of this project an action plan formulated and Kazakhstan's first National Implementation Plan (NIP) prepared.

In 2009 Kazakhstan submitted its National Implementation Plan (NIP) to the Secretariat for the Stockholm Convention on POPs, in which the new POPs and the unintended produced POPs were not considered.

In the framework of the NIP preparation an inventory was conducted on availability POPs pesticides. It revealed that more than 1,500 tons of pesticides and pesticide mixtures are stored at warehouses and storages, often in the absence of protective measures for preventing their release into environment. Based on information reported in NIP, approximately 10% of them are pesticides with POPs properties. However, the inventory of pesticides with POPs properties covered only 20% of the country due geographical, information availability and financial limitations. Soils were commonly found to be polluted with POPs-pesticide wastes.

Concerning the new POPs listed in the Stockholm Convention, there are very limited data concerning their use and production in Kazakhstan, with the exception for limited information on the presence of pesticide stocks. Currently, there is no indication concerning the use of new POPs of industrial relevance in the country's industry due to lack of requirements for data collection and reporting. The uPOPs inventory reported in the NIP did not include important sources of dioxin releases such as incineration of industrial and medical waste, open burning, and the use of coal/wood for cooking, which, in many countries, is reported a substantial source of uPOPs emissions. Information on the monitoring of uPOPs in the environmental media is also missing; therefore, it would be important to transfer, with the support of the project, know-how knowledge accumulated in developed countries related to the monitoring of PCDD/F in soil, water, atmosphere, and biota.

As a direct result of NIP formulation, the following priorities were identified by the group of POPs:

- For PCBs oils/equipment/wastes: updated PCB inventory, development of a detailed plan for decommissioning of PCB-containing equipment, identification of the technology for disposal of PCB-containing equipment, wastes and contaminated soil, storage and disposal of PCB waste;
- For POPs pesticides stockpiles: updated inventory of POP pesticides stockpiles and wastes; ensure environmentally safe and sound management of POPs stockpiles;
- For uPOPs releases: increase the adoption of BAT / BEP in processes that may generate uPOPs, with special reference to incineration and health care waste handling.

Regarding overall situation with country-wide assessment or estimates done on mercury releases, there has been no such dedicated activity recorded to-date. One of reasons for this is that the current national legislation does not establish mercury release standards, though it does regulate mercury in form of waste and reprocessing.

On general statistics, in 2011, according to the Ministry of Energy (former Environmental Protection), 198.6 tons of mercury waste was generated, of which 22.7 tons were neutralized, 37.9 tons were stored at burial sites, 50.1 tons remain at generation sites, and the rest of waste has been sent for further treatment. With respect to the products containing mercury, both ministries, Ministry of Energy nor Ministry of Public Health, have currently no associated legal instructions on registration of mercury users, and, therefore, do not monitor and track volumes of production, sales, installation, and removal from service of such medical equipment and instruments. This situation results in lack of precise data on mercury devices generated as waste by the healthcare sector. Although healthcare establishments report on mercury containing waste, the

information is of little use as it is provided in aggregated format under an overall class G waste (non-infectious hazardous waste) and in various, non-unified measurement units: mass, volume, number of items, and non-quantificational digits.

As commonly reported elsewhere worldwide, it has been confirmed that the main sources of mercury in Kazakhstan's healthcare system are thermometers, straight and compact fluorescent lamps. Preliminary investigation indicated that sphygmomanometers used by the sector are mainly mercury-free – aneroid (bellows).

Based on the methodology developed by the global GEF/UNDP/WHO/UNOPS healthcare waste and mercury management project (<u>www.gefmedwaste.org</u>) as applied to existing hospital/bed statistics and the quantity of mercury waste originating from broken thermometers in Kazakhstan' hospitals is estimated at 236.81 kg/year. A similar quantity of mercury is in medical devices which remain in use in the healthcare sector. No estimation was possible at this stage for lamps and other products containing mercury, being directly used by households.

In overall the main barriers which prevented sound uPOPs, mercury and HCW management were considered the following:

- Limited regulatory framework: no established inventory and monitoring system for uPOPs and new POPs, lack of emissions and release standards for uPOPs and heavy metals respectively; limited linkages between various sector legislation, such as healthcare and environment, and no guidelines on, and enforcement of control measures over, uncontrolled uPOPs releases and incineration;
- Insufficient systemic and institutional capacity: lack of coordinated, cross-cutting and comprehensive system for sound waste and chemicals management, limited collaboration between government authorities, private service providers, and stakeholders such as waste producers;
- Inadequate economic incentives and technical tools: current expensive handling of medical waste, inadequate and poorly functioning systems for collection, transportation and disposal of waste;
- Information and awareness barriers: scarce knowledge on uPOPs impacts, no register and monitoring of uPOPs, HCW and mercury releases to understand the scope of the problem, poor understanding of the linkages between problematic chemical management areas and human health/environmental quality, inadequate knowledge of socio-economic benefits associated with sound waste and chemicals management.

To address these, the Government of Kazakhstan and UNDP formulated a project proposal entitled "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan". The project was approved in February 2012 with a planned duration of four (4) years (September 2013 – September 2017). This project aims to assist the country in implementing its relevant obligations under the Stockholm Convention, in particular to reduce the releases of uPOPs, as well as to build country's capacity, in line with the GEF-6 objectives, to manage mercury releases from medical devices by demonstrating sound approaches to the healthcare waste management. This is accomplished through four principal project's components. Across all components, the project plans for information dissemination and awareness raising on key aspects of the project's work.

The project collaborates with central authorities as well as waste treatment facilities, hospitals and smaller rural clinics within demonstration territories. The project provides support for strengthening the implementation of international convention obligations and guidelines, and is expected to improve cross-sectoral governance for sound chemicals management at the national and local levels.

"NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan" In course of formulation of the project document, during a series of meetings with relevant ministries it was discussed the Government would plan activities such as:

- extending the inventory of POPs stockpile and POP contaminated sites;
- Inventory update of uPOPs and new POPs of industrial use.

However, as clearly stated in the Project Document (ProDoc) the direct objective of the full-sized UNDPsupported GEF-financed project "NIP update, integration of POPs into national planning and promoting sound healthcare waste management in Kazakhstan" is to reduce the releases of unintentionally produced POPs and other globally harmful pollutants into the environment by promoting sound healthcare waste management in Kazakhstan, and to assist the country in implementing its relevant obligations under the Stockholm Convention.

Achievement of the objectives was supposed to be reached within the framework of the following four (4) Components:

- 1. Component 1: Stockholm Convention NIP update and improved institutional coordination on chemical MEAs:
 - Outcome 1.1: POPs inventories improved for informed decision making and priority setting;
 - Outcome 1.2: National capacities on POPs monitoring, analytical capabilities are assessed;
 - Outcome 1.3: Policy, institutional frameworks and enabling regulatory environment are in place to ensure better control on POPs accumulation and emissions;
 - > Outcome 1.4: Improved institutional coordination on chemical MEAs.
- 2. Component 2: Overall mercury situation assessed and initial mercury reduction and containment plan formulated:
 - Outcome 2.1: Mercury assessment implemented, national consultations held to identify priorities for actions and capacity building on mercury risks carried out.
- 3. Component 3: Minimization of unintentional POPs and mercury releases in selected hospitals through demonstration of sound Health-care Waste Management approaches:
 - Outcome 3.1: Sound health-care waste management through uPOPs and mercury reduction approaches are demonstrated in 2-3 regions of the country;
 - Outcome 3.2: Linkages between sound HCWM practices and minimization of uPOPs and mercury demonstrated through training and awareness raising programmes.
- 4. Component 4: Monitoring, learning, adaptive feedback, outreach, and evaluation:
 - > Outcome 4.1: Monitoring, learning, adaptive feedback, outreach, and evaluation.

Component 3 represents the main capacity building and BAT/BEP demonstration element in the overall project design and will practically demonstrate uPOPs and mercury releases reduction by piloting modern waste management approaches at selected hospital facilities:

- waste minimization at the source,
- waste segregation techniques and recommendations for waste handling and interim collection and storage,
- demonstration of affordable non-incineration technologies for the resulting separately collected infectious healthcare waste stream, and
- introduction of mercury-free devices.

These planned activities will be carried out along with the establishment of required partnerships and dissemination and replication of results in the country with the overall target of minimizing POPs/mercury releases into the environment.

The project's Executing Agency/Implementing Partner role was initially assumed by the Ministry of Environmental Protection (MEP), which later became the Ministry of Environment and Water Recourses and finally became the Ministry of Energy (MoE).

The Total required budget for the Project was \$38,412,758. Total allocated resources: \$38,412,758 including GEF Grant \$ 3,400,000 (Project Preparation Grant was \$125,000), regular UNDP resources: \$75,000, UNDP in-kind contribution: \$100,000, Government resources: \$34,315,820 (cost share allocation by Government – it is considered to use funds from state and local budgets for investments to reconstruction and improvement premises for installation of equipment), and other resources: \$521,938 (in-kind by NGOs for capacity-building activities) and an estimated completion date of September 30, 2017. The largest portion of GEF co-finance will be used for capital investment in ten (10) pilot healthcare waste non-combustion treatment centers as described below in Outcome 3.4, and purchase of quality mercury-free thermometers for selected health facilities. The GEF co-finance will be used also for recruitment of international and national experts who will be responsible for preparation of healthcare waste management plans for selected health facilities and regions; development of a training program for health and waste management professionals, and conversion of chosen hospitals into model facilities.

The Long-term objective of the Project will contribute to: communities, national, and local authorities use more effective mechanisms and partnerships that promote environmental sustainability and enable them to prepare, respond and recover from natural and man-made disasters.

The four (4) Components of The Project included:

1. The first outcome is related to updating national implementation plan for the commitments under Stockholm convention in the part of new and unintentional persistent organic pollutants, increase POPs monitoring capability, and improve institutional coordination of INC on chemicals.

2. The second outcome is aimed at assessment of mercury situation in general, to prepare recommendations on accession to Minamata convention and draft preliminary plan on reduction of mercury use.

3. In the third outcome, the plan is to conduct activities, aimed at taking measures to minimize emissions of uPOPs when decontaminating healthcare waste. And it is aimed at creation and demonstration of the safe healthcare waste management system in pilot territories. As pilots, the following have been selected: East-Kazakhstan, Kostanay regions and the city of Astana.

4. The fourth component is aimed at monitoring, education, adaptation and feedback.

There were key assumptions underlying the design for the Objective of the Project¹⁴.

- 1. The government will focus efforts on improving the POPs monitoring system; the coordination center on chemical conventions established;
- 2. Steps will be taken to accede to the Minamata Convention;
- 3. Non-incineration healthcare waste treatment plants are used by healthcare facilities. Mercury thermometers are no longer used in the healthcare system.
- 4. Government provides functional support
- 5. The government understands the gravity of the problem and makes efforts to regulate the process.
- 6. Environmental users have concerns about fulfilling their obligations to manage mercury in industrial processes.

Also, the following risks were described in the ProDoc:

- 1. Lack of commitment, of one or more partners could result in a not properly coordinated effort and in a weak NIP update.
- 2. Difficulties in gathering information due to the lack of commitment, actual data or resources.

¹⁴ As detailed in the Project Results Framework (see also ToR for the Terminal Evaluation).

- 3. Difficulties in reaching the agreement on NIP content and objectives.
- 4. Data limitations constrain priority discussions.
- 5. Draft Plan is delayed in review and acceptance that results in weak enforcement.
- 6. The emission standard for waste incineration is not implemented or delayed in approval.
- 7. Installations that do not comply with the emission standard are not removed from operation.
- 8. All incinerators not compliant with technical and emission standards removed from services.
- 9. Procurement delays.
- 10. Slow process of mercury devices replacement by hospitals.
- 11. Health facilities accept new technology and gradually phase out mercury devices.

2.1 PURPOSE AND SCOPE OF THE EVALUATION

The full-sized UNDP-supported GEF-financed project "NIP update, integration of POPs into national planning and promoting sound healthcare waste management in Kazakhstan a four-year project until 30 September 2017, was launched on 22 October 2013, and is being implemented by UNDP Kazakhstan CO. In accordance with UNDP and GEF M&E policies and procedures, all full and medium-sized UNDP support GEF financed projects are required to undergo a terminal evaluation upon completion of implementation.

This evaluation focused on providing evidence and information for the UNDP-supported GEF-financed project to help determine: what The Project components and activities have worked well and why; which have not worked so well and why; lessons learned; and recommendations on how the program can be improved in its remaining implementation period to 30 September 2017 and in future activities.

The evaluation linked the program design, assumptions, planning, implementation, risk management, and adaptive management of The Project components and activities to the outputs, outcomes and lessons learned and recommendations that are drawn from The Project to date. The evaluation highlighted specific ways in which The Project can be improved in its follow up activities as new project/s, and to inform the planning of the proposed any new follow-on project scheduled for following years. The primary audience for the evaluation is the UNDP-supported GEF-financed project through the UNDP CO in Kazakhstan. The secondary evaluation audiences are the Government of Kazakhstan (GoK), program stakeholders, beneficiaries, and other donors.

Initially it was expected that the evaluation team will be composed of 1 international evaluator and 1 national evaluator (see Annex 1). Due to difficulties to find experienced national evaluator in the given timeframe it was suggested that the work will be conducted only by one international evaluator with requirement to have fluent Russian language ability. The evaluation team (ET) was represented by Dr. Zharas Takenov, International Evaluator. Dr. Takenov was responsible for ensuring the overall technical delivery of the contract. This includes managing the development of all written deliverables and providing final review and sign off on the technical quality of all deliverables. Dr. Takenov was involved in all phases of the evaluation including the desk review, data collection, and the analysis and report writing.

2.2 KEY ISSUES ADDRESSED

In agreement with the inception plan for the TE and meetings held with UNDP CO on July 21, 2017 and Skype conversation with RTA on April 19, 2017¹⁵ it was decided that the TE would focus especially on the aspects of The Project implementation and lessons learned that are relevant for future programming of UNDP initiatives¹⁶ in Kazakhstan, including:

¹⁵ Interview with Maksim Surkov, UNDP/GEF Regional Technical Specialist (RTA) at RBEC Istanbul, 19 July 2017 (skype).

¹⁶ New: UNDP-supported GEF-financed project Minamata Initial Assessment for Kazakhstan Project, signed by UNDP on 14 July 2017.

- The Project relation to the main objectives of the GEF focal area, and to the environment and development priorities at the local, regional and national levels;
- Achievement of expected outcomes and objectives of The Project;
- The Project implementation in-line with international and national norms and standards;
- The Project long-term sustainability and financial, institutional, social-economic, and/or environmental risks to sustaining long-term project results.
- The Project contribution or its role in enabling progress toward, reduced environmental stress and/or improved ecological status.

The Regional Bureau in Istanbul could provide useful information about the expectations regarding EEL project.¹⁷.

2.3 METHODOLOGY OF THE EVALUATION

The methodology followed for the TE is based on the UNDP/GEF M&E guidelines and the Terms of Reference and consists of:

- A review of the project documentation submitted by UNDP to the evaluator;
- Collection of lacking information from UNDP Country Office;
- Collection of additional information regarding The Project implementation context;
- Conducting semi-structured interviews with the national project stakeholders, UNDP CO staff¹⁸, Project Manager, RTA; and retained consultants;
- Analysis of information;
- Assessment of the outputs, outcomes and impact of The Project in relation to the objectives and indicators set forth in the project logical framework;
- A review of the assumptions and the strategy of The Project;
- A review of the achievements made by The Project in terms of POP face out; and:
- Two three visits in Ust-Kamenogorsk, Kostanay and Astana.

The desk review has looked at the documents supplied by UNDP CO and Project Team. The Evaluator has reviewed all relevant sources of information, such as the project document, project reports – including Annual APR/PIR, project budget revisions, midterm review, progress reports, GEF focal area tracking tools, in particular evaluator shall validate the data in the GEF-6 Chemical and Waste Tracking Tool (how the tool is filed in and confirmed the figures there filled in by the project team), project files, national strategic and legal documents, websites of relevant projects and any other materials that the evaluator considers useful for this evidence-based assessment. A list of documents that the project team has provided to the evaluator for review is included in Annex 6. The Evaluator has added supplemental documents and links to the desk review identified during the evaluation mission to Ust-Kamenogorsk, Kostanay and Astana.

The Evaluator has used a mixed-methods approach to collect data for the evaluation. There were two phases of data collection: 1) a desk review and 2) fieldwork involving Key Informant Interviews (KIIs). The desk review phase has largely been completed prior field missions. The desk review provided the necessary context for the field evaluation, preparing the Evaluator for the development of data collection tools, and identifying data gaps, regarding the development disparities between women and men. In terms of location, the Evaluator focused data collection in Ust-Kamenogorsk, Kostanay and Astana were the locations

¹⁸ Specifically: UNDP RK's Deputy Resident-Representative, Assistant Resident Representative, Programme Analyst, Programme Associate.

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"NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan" identified in the inception phase as specific locations for The Project operations and management. Additional data was collected in Almaty after the mission completed.

An initial list of respondents for the KIIs has been created based on input from UNDP CO, Project Team, and desk review. The following types of individuals/entities will be targeted (see also Annex 5):

Project:

1	Ms. Nina Gor	Project Manager.
2	Ms. Assel Shakhanova	Expert on Healthcare Waste and Mercury Pollution
		Management.
3	Ms. Saltanat Bayeshova	Expert on Capacity Building in the Field of Persistent Organic
		Pollutants and Other Harmful Chemical Substances.
4	Ms. Zulfiya Baisagatova	Project Assistant.
5	Ms. Madina Kassenova	Procurement Assistant.

UNDP:

1	Mr. Maksim Surkov	UNDP-GEF RTA, UNDP RC, Istanbul.
2	Mr. Rassul Rakhimov	Head of SDU Unit, UNDP CO.
3	Ms. Victoria Baigazina	Programme Associate of SDU Unit, Project Supervisor,
		UNDP CO.
4	Ms. Zhanetta Babasheva	M&E Focal Point, UNDP CO.

GEF Operational Focal Point:

1	Mr. Gani Sadibekov	Vice Ministry	Ministry of Energy of the RK.
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Ministry of Energy of RK – Main Partner:

1	Ms. Bizara Dosmakova	Deputy Director of the Waste Management Department,	
		National Project Director Waste Management Department,	
		Ministry of Energy of RK.	
Project	t Partners:		
1	Zhan Nurbekov	Director of Waste Management Department, Ministry of Energy of RK.	
2	Zhanar Asanova	Head of the Ownerless Waste Management Department, JSC "Damu.	
		Zhasyl" under the Ministry of Energy of the RK.	
3	Zhuldyz Urazbekova	Head Expert of Sanitary and Hygienic Surveillance	
		Department.	
		Committee for Public Health Protection under the Ministry of	
		Public Healthcare of RK.	
4	Danara Alimbayeva	Director of the Environmental Monitoring Department	
		Kazhydromet.	
5	Samat Kaliyev	Deputy Head of Department of Natural Resources and	
		Environmental Governance of Kostanay region.	
6	Svetlana Arsentyeva	Head of Unit, Department of Natural Resources and	
		Environmental Governance of Kostanay region.	
7	Vladimir Mikhailenko	Chief Doctor of Kostanay Regional Narcological	
		Dispensary.	
8	Sergey Mukashev	Specialist of State Environmental Control Unit, Department	
		of Ecology of Kostanay region.	
9	Tatyana Kozlyanskaya	Head of the Integrated Environmental Monitoring Laboratory Branch of the RSE "Kazhydromet" for East Kazakhstan region.	

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	"NIP Update, Integration of	f POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan"
10	Sergey Popov	Head of the Center, Center of Mother and Child of East-
		Kazakhstan region.
11	Kazken Orazalina	Expert on chemicals, NGO.
12	Kavira Mukasheva	Senior teacher Department of Occupational Health,
		Communal Hygiene, JSC "Medical University of Astana".

Due care was taken by the Evaluator to avoid bias regarding The Project design, situation and baseline analysis, implementation, risk assessment and management, project outputs/results and so forth. The Evaluator has spent two weeks for the field mission in Kazakhstan. The Evaluator spent 11 working days for the field mission in Astana (3 days), Kostanay (3 days) and East-Kazakhstan regions (5 days, Ust-Kamenogorsk and Katon-Karagay Region). The Evaluator conducted its field mission to the following project sites¹⁹:

- > PSE on REM Center of Mother and Child in Ust-Kamenogorsk city (East-Kazakhstan region);
- > PSE on REM Central Rayon Hospital of Katon-Karagay Rayon in East-Kazakhstan region;
- "Kostanay ECOMEDUTILIZATSIYA 2016 LLP in Kostanay city;
- > PSE on REM ZHITIKARA Central Rayon Hospital in Kostanay region;
- > PSE on REM RUDNYI Municipal Hospital in Kostanay region;
- MEDOX LLP in Astana city.

The Evaluator examined evidences from all data sources using a combination of pre/post, descriptive, and qualitative analysis. The findings from these analyses were used to triangulate findings in response to each evaluation question, allowing the Evaluator to substantiate conclusions. All findings were supported with quantitative project performance monitoring data when possible, as well as other program documentation, interviewee statements, and other secondary data identified during the fieldwork evaluation phase. Where it exists, the Evaluator conducted secondary data analysis.

Findings examined both intended and unintended impacts affecting women and men, discussions of gendersensitive issues, and were disaggregated by sex as appropriate. Data analysis continued after the field-based phase of the evaluation has been completed. Oral briefings of the preliminary findings of the evaluation has been presented to the UNDP CO and Project Team in Astana on the last day of the field missions on 21 July 2017. Upon UNDP approval of the final report, the Project Team will submit it to the GEF OFP and translate the Executive Summary of the report into Russian.

2.4 STRUCTURE OF THE EVALUATION

The evaluation report follows the general document structure²⁰ as suggested for this purpose. Section 3 provides a description of the Project and the devised strategy in relation to its development context. Section 4 presents the findings of the Evaluator covering project design, implementation and results. The sections 5 and 6 summarize the conclusions, recommendations and lessons learned.

3 THE PROJECT AND ITS DEVELOPMENT CONTEXT

The Stockholm Convention on Persistent Organic Pollutants (POPs) was adopted in May 2001 with the objective of protecting human health and the environment from toxic and hazardous POPs listed chemicals and wastes. It entered into force in May 2004. The convention initially covered twelve (12) POPs chemicals

¹⁹ See Annex 16.

²⁰ Project-Level Evaluation: Guidance for Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects, Evaluation Office, 2012, United Nations Development Programme

– so called "dirty dozen". At its fourth meeting of the Conference of Parties (COP) in May 2009, the Stockholm Convention was amended to include the following nine (9) new POPs in Annex A²¹ and Annex B²². The amendments entered into force for most of the Stockholm Convention Parties on 26 August 2010. Further, one additional amendment (endosulfan chemical listed in Annex A) was introduced in May 2011 at the fifth (5th) COP. According to Article 7 of the Convention, Parties are required to develop National Implementation Plans (NIP) to demonstrate how they intend to implement obligations assumed under the Stockholm Convention. According to existing rules, each Party should develop and submit the NIP within two (2) years from ratification. In compliance to the above, Kazakhstan ratified the Stockholm Convention on November 9, 2007.

The first NIP, prepared with GEF assistance²³, addressing the inventories and strategic action plan for the initial twelve (12) POPs, was developed by the Ministry of Environmental Protection. After formulation works were completed in 2009, the NIP was officially transmitted to the Stockholm Convention's Secretariat on December 8, 2009, which allowed for additional preparation of follow-up capacity building and investment programmes for safe POPs management in Kazakhstan.

After 2007, Kazakhstan, to respond to the recent amendments in the Stockholm Convention's chemical lists, was required to review and update its NIP. Accordingly, such updated strategic document was expected within two years of the date when amendments entered into force, and this represents an urgent priority for the country as with regard to the NIP update on the new nine (9) POPs overdue for August 2012, and so for the recently added to the list of POPs the endosulfan substance.

In course of formulation of the project document, during a series of meetings with relevant ministries it was discussed the Government would plan activities such as:

- extending the inventory of POPs stockpile and POP contaminated sites;
- Inventory update of uPOPs and new POPs of industrial use.

The NIP update process would enable Kazakhstan to establish inventories of products and articles containing new POPs and to identify industrial processes where new POPs are employed or unintentionally produced. The NIP update would build on existing national coordination mechanism and capacities established during the development of the original NIP.

The Government of Kazakhstan was committed to achieving these development goals, but has recognized that success requires not only technical solutions, but also the correct combination of policy, investment, and information delivery.

Toward these ends, since 2013, the UNDP, under financial support from the GEF, has supported the Ministry of Energy (MoE) of the RK in a project entitled "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan" (The Project, PIMS 4612). As it draws to its scheduled close after four years, The Project can present numerous achievements and impacts, for the benefit of Kazakhstan and the whole planet.

3.1 PROJECT START AND ITS DURATION

The project proposal entitled "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan" was endorsed by GEF CEO on August 6, 2013 under umbrella of GEF Focal Area Strategic Objective: *Persistent Organic Pollutants, CHEM-1,3,4*. The ProDoc

²¹ Listed chemicals in Annex A: Alpha hexachlorocyclohexane, Beta-hexachlorocyclohexane, Chlordecone, Hexabromobiphenyl, Hexabromobiphenyl-ether and Heptabromodiphenyl-ether, Lindane, Pentachloro benzene (also listed in Annex C), Tetrabromodiphenyl-ether and Pentabromodiphenyl-ether.

²² Perfluorooctane sulfonic acid (PFOS), its salts and Perfluorooctane sulfonyl fluoride.

²³ <u>http://www.thegef.org/gef/project_detail?projID=1586</u>

was signed on October 22, 2013 within three months since the receipt of official communication from the GEF Secretariat. Timing of the inception workshop has been delayed by six (6) months due to process of hiring of relevant national project manager and project staff. The inception workshop and afterwards planning period was used to revisit and discuss the Project Results Framework, base-line situation and the entire project document before moving ahead in earnest with project implementation.

The Inception Workshop has gathered over 65 representatives of Ministries, regional authorities, health care professionals, NGOs and companies, as well as national and local media. The participants did not made remarks on the project scope and objectives, nor proposed inclusion of additional activities. The project met with positive feedback, and was of high importance. Mid-term and final targets of adoption of supporting policies were introduced, including: completion inventory and defining updated NIP obligations including uPOPs, new POPs, POPs pesticides and industrial POPs, with inclusion of new POPs for the Government' review and endorsement; Assessing mercury situation in the country, completion of inventory and organizing inter-agency consultations, assessing national capacity to handle recovered mercury and provide recommendations for improvement for development of Draft National Mercury Reduction Plan with identified priorities, establishing of Mercury emission standards; Conducting inventory of stockpiles and burial sites of pesticides covering at least 70% of the country, elaborating and institutionalizing plan for maintaining and completing the above inventories, getting National POPs monitoring plan approved as part of relevant national policies and documents; Participating in regional monitoring networks.

The Project LogFrame remained the same regardless suggested minor change to some of project activities as specified in the Inception report in 2014²⁴. All participants have agreed to rephrase Activity 2.1.3 of Outcome 2.1. "Outline of National Mercury Reduction Plan Development" into "Outline of Recommendations on Reduction of Mercury Use and Emissions in Kazakhstan". It was suggested due to the analyses and understanding of the Government position on the Minamata Convention ratification, which was not clear at that moment, and work on required amendments to the national legislation on mercury management were still on their initial stages of discussion and preparation. The word "Recommendations" would easier gain Government acceptance while "National Plan" may not be formally approved and enforced within the project lifespan due to lack of defined national policy and appropriate legislation.

The inception phase reconfirmed the timeliness of the UNDP-supported GEF-financed project's onset and matching needs of national and local governments and population for technical assistance with the project's position to deliver it. Technically, the inception phase was completed but with some delays (though these delays had objective reasons as discussed above): inception workshop conducted and the Project Manager, Project Team and Project Board established (6) six months after the project's signing.

The project had some delays in implementation of its activities. The key factors affecting the speed were internal and external and included: (i) procurement delays, (ii) frequent government restructuring, (iii) slow implementation of Outcome 3 due to unexpected changes of the place for equipment installation in the Pilot territories, which required additional work on determination the new installation places and conducting long negotiation processes with local governments and key partners as well as and formalizing new agreements²⁵. The mentioned factors have been captured by The Project's risk management system and are being monitored by The Project adjusting its planning and implementation accordingly²⁶.

²⁴ GEF/UNDP Project: NIP update, integration of POPs into national planning and promoting sound healthcare waste management in Kazakhstan. Consultant: Pawel Gluszynski, Report of Inception Phase: April 28 – May 2, 2014.
²⁵ See Management Response to the MTE Recommendations.

²⁶See also Mid-Term Evaluation Report of the UNDP-supported GEF-financed Full-Sized Project "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan". Dr. Ute Pieper, International Consultant, Olga Klimanova, National Consultant.

3.2 PROBLEMS THAT THE PROJECT SEEKS TO ADDRESS

During project preparation, UNDP and a team of national and international consultants gathered detailed information on situation with products and articles containing new POPs and industrial processes where new POPs were employed or unintentionally produced, and assessed the existing and developing legislative framework regarding in Kazakhstan. The project development team met with senior representatives of Ministry of Environmental Protection (MEP), other national government agencies, municipal administrations and utility companies, and private lighting vendors. This research and stakeholder consultation led in turn to a comprehensive barrier analysis and elaboration of proposed activities to address the barriers.

The main barriers which presently prevent sound uPOPs, mercury and HCW management were considered the following:

- *Limited regulatory framework*: no established inventory and monitoring system for uPOPs and new POPs, lack of emissions and release standards for uPOPs and heavy metals respectively; limited linkages between various sector legislation, such as healthcare and environment, and no guidelines on, and enforcement of control measures over, uncontrolled uPOPs releases and incineration;
- *Insufficient systemic and institutional capacity*: lack of coordinated, cross-cutting and comprehensive system for sound waste and chemicals management, limited collaboration between government authorities, private service providers, and stakeholders such as waste producers;
- *Inadequate economic incentives and technical tools*: current expensive handling of medical waste, inadequate and poorly functioning systems for collection, transportation and disposal of waste;
- *Information and awareness barriers*: scarce knowledge on uPOPs impacts, no register and monitoring of uPOPs, HCW and mercury releases to understand the scope of the problem, poor understanding of the linkages between problematic chemical management areas and human health/environmental quality, inadequate knowledge of socio-economic benefits associated with sound waste and chemicals management.

To address these barriers, all parties agreed that the project should embody an integrated approach involving four interrelated components:

- Updating national implementation plan for the commitments under Stockholm convention in the part of new and unintentional persistent organic pollutants, increase POPs monitoring capability, and improve institutional coordination of INC on chemicals.
- Assessing of mercury situation in general, to prepare recommendations on accession to Minamata convention and draft preliminary plan on reduction of mercury use.
- Minimizing emissions of uPOPs when decontaminating healthcare waste. And it is aimed at creation and demonstration of the safe healthcare waste management system in pilot territories. As pilots, the following have been selected: East-Kazakhstan, Kostanay regions and the city of Astana.
- Conducting monitoring, education, adaptation and feedback activities.

The initial project design, including the definition of these components, remained largely unchanged between the PIF and project preparatory stages. Similarly, during project implementation until its end in September 2017, the structure and components of the project proved to be enduringly relevant and well aligned with real needs.
3.3 OBJECTIVES OF THE PROJECT

The direct objective of the Project is defined as follows²⁷: "To reduce the releases of unintentionally produced POPs and other globally harmful pollutants into the environment by promoting sound healthcare waste management in Kazakhstan, and to assist the country in implementing its relevant obligations under the Stockholm convention".

Applicable GEF Focal Area Strategic Objective: Objective CHEM-1: Phase out POPs and Reduce POPs Releases, Objective CHEM-3: Pilot Sound Chemicals Management and Mercury Reduction, Objective CHEM-4: POPs Enabling activity. As per the ProDoc it is expected that by sound management of mercury waste in the health sector the future waste is minimized by 36.81 kg/a (see Annex 12). The main project objective is planned to be achieved through improving policy framework, strengthening uPOPs and new POPs assessment and inventory, increased awareness among the population and professionals and demonstration projects. There were key assumptions underlying the design for the objective of the Project²⁸.

- 1. The government will focus efforts on improving the POPs monitoring system; the coordination center on chemical conventions established; Steps will be taken to accede to the Minamata Convention;
- 2. Non-incineration healthcare waste treatment plants are used by healthcare facilities. Mercury thermometers are no longer used in the healthcare system;
- 3. Government provides functional support;
- 4. The government understands the gravity of the problem and makes efforts to regulate the process;
- 5. Environmental users have concerns about fulfilling their obligations to manage mercury in industrial processes.

Also, the following risks for achieving intended objective were described in the ProDoc:

- 1. Lack of commitment, of one or more partners could result in a not properly coordinated effort and in a weak NIP update.
- 2. Difficulties in gathering information due to the lack of commitment, actual data or resources.
- 3. Difficulties in reaching the agreement on NIP content and objectives.
- 4. Data limitations constrain priority discussions.
- 5. Draft Plan is delayed in review and acceptance that results in weak enforcement.
- 6. The emission standard for waste incineration is not implemented or delayed in approval.
- 7. Installations that do not comply with the emission standard are not removed from operation.
- 8. All incinerators not compliant with technical and emission standards removed from services.
- 9. Procurement delays.
- 10. Slow process of mercury devices replacement by hospitals.
- 11. Health facilities accept new technology and gradually phase out mercury devices.

²⁷ UNDP-supported GEF-financed project "NIP update, integration of POPs into national planning and promoting sound healthcare waste management in Kazakhstan" ProDoc.

²⁸ As detailed in the Project Results Framework (see Annex 1: ToR for the Terminal Evaluation).

3.4 EXPECTED RESULTS

The intended activities, outputs, and outcomes of the Project presented below. Numbering and content of components and activities in the Table 3 (see below) are the same as shown in the ProDoc:

Table 3: Intended activities, outputs, and outcomes²⁹

Activiti	es	Outputs	Outcomes
1.1.1.	Capacity building programme (trainings) for involved stakeholders developed and implemented on POPs risks, inventories, POPs tracking, monitoring of data reported by responsible parties.	Output 1.1: POPs inventories improved for informed decision making and priority	Outcome 1: Stockholm Convention
1.1.2.	National information system (inventory) on POPs expanded (updated information on uPOPs and new POPs) ³⁰ .	setting	NIP update and
1.2.1.	Studies on existing POPs analytical and monitoring capabilities for the whole range of POPs (with focus on new POPs) carried out.	Output 1.2: National capacities on POPs	improved institutional
1.2.2.	A set of recommendations for the improvement of such capabilities formulated and submitted to the Government	monitoring, analytical capabilities are assessed	coordination
1.3.1.	Institutional coordination and compliance with international agreements improved through firmer institutionalization of POPs issues into national structures	Output 1.3: Policy, institutional frameworks and enabling regulatory	MEAs
1.3.2	National legal framework, by aligning institutional roles, reviewed and improved to include the issue of insofar unaddressed POPs, uPOPs and new POPs	environment are in place to ensure better control on POPs accumulation and emissions	
1.3.3.	Sectoral technical guidelines updated to include the issue of priority POPs, including sampling and analysis methods		
1.3.4.	Capacity building programme (trainings) and consultations for involved stakeholders developed and implemented on POPs related risks, POPs monitoring, institutional roles and responsibilities, POPs control legislation benchmarks and enforcement		
1.3.5	National Implementation Plan (NIP) on Stockholm Convention obligations with inclusion of new POPs reviewed and updated, with elaboration of specific action plans on new POPs.		
1.4.1	Review and better alignment of ministerial functions on implementation of Conventions' obligations	Output 1.4: Improved institutional coordination on	
1.4.2	Establishment of coordination mechanisms to support synergistic implementation of Stockholm, Rotterdam and Basel Conventions and established framework (system) for monitoring, accountancy and reporting on the implementation of the Stockholm, Basel and Rotterdam conventions in Kazakhstan.	chemical MEAs	
1.4.3	Capacity of government authorities on implementation of chemical conventions improved.		
1.4.4.	Improved data collection and chemical review processes for decision making and control improvements on the import and use of new dangerous chemical substances		
2.1.1.	Capacity building programme (trainings) for involved stakeholders developed and implemented on mercury risks, inventories, sources, data tracking	Output 2.1: Mercury assessment implemented, national consultations held to	Outcome 2: Overall mercury situation
2.1.2	Mercury situation in Kazakhstan assessed in coordinated manner jointly with UNEP	identify priorities for actions	initial mercury

²⁹ ProDoc of UNDP-supported GEF-financed project "NIP update, integration of POPs into national planning and promoting sound healthcare waste management in Kazakhstan"

³⁰ During the Inception Meeting, there were discussion on rephrasing of 3 activities 1.1.2; 2.1.2; 2.1.3 and editing Component 2 (e.g. Activity 1.1.2 of Outcome 1.1 "National information system (inventory) on POPs expanded (updated information on uPOPs and new POPs)." was suggested to change to "National inventory on POPs expanded (updated information on uPOPs and new POPs)"; Activity 2.1.2 of Outcome 2.1 "Mercury situation in Kazakhstan assessed in coordinated manner jointly with UNEP" was suggested to change to "Mercury situation in Kazakhstan assessed"; Activity 2.1.3 of Outcome 2.1. "Outline of National Mercury Reduction Plan developed" was suggested to change into "Outline of Recommendations on Reduction of Mercury Use and Emissions in Kazakhstan"). See: "Inception Report. NIP update, integration of POPs into national planning and promoting sound healthcare waste management in Kazakhstan. May 2014". The suggested for editing activities in the Table are highlighted by blue collar.

"NIP Update, Integration of POPs into National Planning and	Promoting Sound Healthcare Waste Management in Kazakhstan"	
2.1.3 Outline of National mercury reduction plan develope2.1.4 Public awareness raising campaigns on mercury risks	d and capacity building on red conducted mercury risks carried out pla	eduction and ontainment an formulated
 3.1.1. Review of national policies and update of HCWM real and road map 3.1.2 Development of Regional HCWM Managemen provinces 3.1.3 Pilot HCWM projects in selected hospitals, including mercury containing thermometers 3.1.4 Establishment of HCW treatment centers in selected 3.2.1 Development and dissemination of BAT/BEP technic general awareness raising 3.2.2 Development of national training programs on uPOP sound HCWM, partnership with stakeholders and nat BAT/BEP demonstration 	egulatory frameworkOutput 3.1: Sound health-care waste management through uPOPs and mercury reduction approaches are demonstrated in 2-3 regions of the countryOutput Mi uni PO me 	utcome 3: (inimization of nintentional OPs and ercury releases selected spitals rough emonstration of ound Health- ire Waste (anagement oproaches
4.1.1. M&E and adaptive management applied to project in mid term evolution findings with lessons learned as	response to needs, Output 4.1: Monitoring, Output 4.1: Monitoring, Output 4.1: Monitoring, Mu	utcome 4:
mu-terni evaluation mungs with lessons learned es	outreach, and evaluation. lea fee outreach, and evaluation. lea fee out eva	arning, laptive edback, utreach, and valuation

3.5 DEVELOPMENT CONTEXT

In addition to reflecting national priorities in Kazakhstan, The Project also builds upon the existing goals and activities of UNDP, with environmental sustainability being one of the eight millennium development goals (MDGs) that UNDP is playing a central role in helping to promote. The Project strongly supported the implementation of UNDP CDP 2011-2015 and 2016-2020. The Project builds on the previous UNDP-supported GEF-financed projects in Kazakhstan, and the project entitled "Assistance to Kazakhstan in Fulfilling its Commitments Under the Stockholm Convention of Persistent Organic Pollutants" (2003-2006) with the financial support of the GEF and technical support provided by UNDP. The Project is an integral part of the current UNDP/GEF portfolio in Kazakhstan and the lessons learned from this project are expected to contribute to the successful implementation of the current and new UNDP-supported GEF-financed projects to support: "Minamata Initial Assessment for Kazakhstan" (2017-2019) and "Energy Efficient Standards, Certification, and Labelling for Appliances and Equipment in Kazakhstan" planned for the period from second part of 2017- 2022.

The project is one of the two (2) close projects in the RBEC region (in the Kyrgyz Republic the similar UNDP supported and GEF financed project "Protect Human Health and the Environment from Unintentional Releases of POPs and Mercury from the Unsound Disposal of Healthcare Waste in Kyrgyzstan", which started in September 2014 and currently under implementation, also funded under GEF V). The projects in these countries cooperate and share lessons as they progress. In its turn, it is expected that this Project will provide lessons for other similar POP projects in other UNDP regions, and be an important part of UNDP-GEF portfolio globally.

The Project team participated in regional conference "The Future of Biosafety and Biosecurity in Central Asia, Afghanistan and Further Countries from the Region – Approaches, Achievements and Challenges, held in October 2014 in Bishkek. The conference made available the opportunity to get up-to-date information related to international achievements in the field of biosafety and biosecurity in the unique region – Central

Asia, and assist to development of regional cooperation and partnerships between government and nongovernment organizations, international institutions, public centers, universities and private sector organizations. Within the framework of the conference the both projects' representatives have established contacts and exchanged their practical experiences.

3.6 BENEFICIARIES AND STAKEHOLDERS

The **Project inception phase** of The Project was also highly consultative and The Project could be credited for that. The main stakeholders involved in the **implementation of The Project** are grouped in the following five (5) categories:

- ➢ Government at all levels, including:
 - 1. Ministry of Energy of the Republic of Kazakhstan;
 - 2. Environmental Department on East Kazakhstan region;
 - 3. Environmental Department on Kostanay region;
 - 4. Committee for the Protection of Public Health of the Ministry of Healthcare of the RK;
 - 5. Department for the Protection of Public Health of East-Kazakhstan region;
 - 6. Department for the Protection of Public Health of Kostanay region;
 - 7. Department of Public health of East-Kazakhstan region;
 - 8. Department of Public health of Kostanay region;
 - 9. Department of Natural Resources and Environmental Governance of Astana;
 - 10. Department of Natural Resources and Environmental Governance of Kostanay Region:
 - 11. JSC "Zhasyl Damu";
 - 12. RSE CEC "Information and analytical center of environment protection";
 - 13. RSE "Kazhydromet";
 - 14. East Kazakhstan Branch of RSE "Kazhydromet";
 - 15. North Kazakhstan Branch of RSE "Kazakhstan";
 - 16. RSBSE "Scientific-practical center of sanitary and epidemiology expertise and monitoring" of the Committee for the Protection of Public Health of the Ministry of Public Health of the RK;
 - 17. RSE "Kazakhstan Institute of Standardization and Certification" of the Committee for Technical Regulation and Metrology, Ministry for Investment and Development of the Republic of Kazakhstan.
- Institutional stakeholders, including
 - 1. United Chemical Company LLP;
 - 2. PSE on REM "Center of Mother and Child" under the Healthcare Department of East-Kazakhstan Regional Akimat;
 - 3. PSE "Zhetigora Central Rayon Hospital" under the Healthcare Department of Akimat of Kostanay region;
 - 4. PSE "Rudnyi Municipal Hospital" under the Healthcare Department of Akimat of Kostanay region;
 - 5. PSE on REM "Central Rayon Hospital of Katon-Karagay Rayon" under the Healthcare Department of East-Kazakhstan Regional Akimat;
 - 6. PSE on REM "Central Rayon Hospital of Zaisan Rayon" under the Healthcare Department of East-Kazakhstan Regional Akimat.
- Private sector:
 - 1. "MEDOX" LLP in Astana;
 - 2. "Kostanay Ecomedutilizatsiya 2016" LLP;
 - 3. "Synap plus" LLP;
 - 4. "Mercury safety" IE;
 - 5. "VK Regional Ecological Demercurization Center" LLP;
 - 6. "Utilization LTD" LLP;
 - 7. "Ibraikhan and K-LTD" LLP.

- Academia and educational Institutes. The project works closely with several higher educational and research institutes, including:
 - 1. Laboratory of analytical ecotoxicology, Institute of environment and evolution institute by Severtsev;
 - 2. "Astana medical university" JSC;
 - 3. Research Centre for Toxic Compounds in the Environment (RECETOX).
- Non-Governmental Organizations (NGOs): The project cooperates with several NGOs, including:
 - 1. Center of Sustainable Development;
 - 2. "Human Health Institute" PO;
 - 3. Ecological Museum.

The ProDoc contained a section on "Stakeholder Analysis" which listed the roles and responsibilities of various stakeholders having a role in the management of Healthcare Waste, Pesticides and POPs. The project document listed stakeholders (e.g. entities) with whom the project had engaged during the PIF/PPG phase, as well as larger groups of project stakeholders, which the project engaged with during project activities (e.g. Health facilities, NGOs, regional and local government authorities, public and international development agencies, etc.).

In the section "Stakeholder Involvement Plan", the ProDoc elaborated upon the ways in which it would engage various project stakeholders, including among else, project board meetings, technical consultations, trainings and outreach activities and awareness raising events.

Throughout the evaluation³¹ it was obvious that the project during its implementation had been able to reach out to and engage a very large number of stakeholders. Although The Project does not have formulated communication strategy, but it undertakes targeted activities to communicate its objectives and results to various groups through media coverage, visual materials, workshops and trainings, public events. For example, The Project created awareness and capacity on POPs, mercury and healthcare waste management of more than 1450 project beneficiaries. This includes also study tours on "POPs Identification methods in theory and practice" to Czech Republic at which Regional branches of RSE "Kazhydromet", governmental bodies, governmental laboratories and local authority participated and a study tour on «International experience of healthcare waste management in the context of Latvia experience" at which governmental bodies in the sphere of environment and healthcare, medical institutions participated. Furthermore, a mercury leaflet has been developed/disseminated and a Campaign on Collection of Pharmaceuticals and Thermometer has been conducted. The Project information is regularly updated and provides beside others information about the project, infographics, Implementation plan of the RK on the obligations under the Stockholm Convention, map of the special equipment for the disposal of medical wastes in the pilot regions, project events, news and contacts on the website of JSC Zhasyl Damu of the Ministry of Energy: http://www.zhasyldamu.kz/proekt-proon.html.

The evaluators believe the involvement of the large number of stakeholders as well as significant number of project beneficiaries, which benefitted from awareness raising and capacity building is a good achievement, and is to the credit of The Project team and the Government key partners.

³¹ See also Mid-Term Evaluation Report of the UNDP-supported GEF-financed Full-Sized Project "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan". Dr. Ute Pieper, International Consultant, Olga Klimanova, National Consultant.

3.7 MANAGEMENT ARRANGEMENT

Full-time **Project Manager**, full-time **Project Assistant** and part-time **Procurement Assistant** were carrying day-to-day activities of the project. Project team also includes full-time **Project Expert on Healthcare Waste and Mercury Pollution Management** and **Project Expert on Capacity Building in the Field of Persistent Organic Pollutants.**

At the time of project design, formulation, inception and implementation since 22 October 2013 until its end in September 2017 The Project Team was working under supervision of 3 different UNDP CO staff due to the carrier development and change of scope of work of these staff.

National and international **consultant services**, including the contracted services of firms as well as individuals, were engaged across all components in various technical areas, including policy and standards development, uPOPs and new POPs inventories, POPs-reduction and mercury-recycling program development and implementation, assessment, education and outreach, and demonstration project design, implementation, and evaluation.

Outside direction and oversight were provided by two different but closely linked bodies. The **Project Board** (Steering Committee) consisted of the **National Project Director**, a representative of the Government implementation entity, and a senior representative of UNDP. The Project Board includes representatives of state bodies and other stakeholders, namely the Ministry of Energy of the Republic of Kazakhstan; The Ministry of Health and Social Development of the Republic of Kazakhstan (RSE "National center for labor hygiene and occupational diseases"); Science Committee of the Ministry of Education and Science of the Republic of Kazakhstan; The Ministry of Defense of the Republic of Kazakhstan; Ministry for Investment and Development of the Republic of Kazakhstan; Ministry of National Economy of the Republic of Kazakhstan (the Division of sanitary-hygiene surveillance); The Ministry of Agriculture of the Republic of Kazakhstan; The division of natural resources and environmental management of the akimat (local administration) of Astana; JSC "Zhasyl Damu" of the Ministry of Energy of the Republic of Kazakhstan; "Karaganda Ecological Museum" NGO; "Olzhas" LLP.

Meetings of the Project Board are held once a year for the purposes of reporting on the work progress and approval of the Work Plan for the forthcoming period, budgets, and key hires. They are carried out in accordance with the dates that are pre-planned and coordinated with the UNDP (at the end of the reporting year or early in the year following the reporting period). This committee provided consensus management decisions when guidance is required by the Project Manager. Expected responsibilities of the National Project Director and the Project Board were elaborated in detail in their ToRs.

The Advisory Technical Committee comprised of representatives of various spheres, as well as experts competent in the implementation of all three components of the project and consists of 5 members: Deputy Director of the RSE "National Center for sanitary-epidemiological examination and monitoring" of the Ministry of National Economy of RK; Deputy Head of Consumer Rights Protection Department of East Kazakhstan region, Manager of the joint project of the Government of RK and WB for preparation of the feasibility study for construction of the plant for POPs elimination, a national expert on hazardous waste; a specialist of the division for medical and preventive work and licensing of the Health Department of East Kazakhstan region. This Committee provided guidance on various aspects of project implementation, including technical and policy goals, implementation strategies, consultant searches, evaluation, and coordination with related activities. The Committee members met annually, with periodic consultation as needed throughout the year. The Project Board should actively seek and took account of the input of the Advisory Technical Committee. It was expected that the Project Board meetings, where possible, would occurred immediately after the annual meetings of the Advisory Technical Committee.

UNDP acted as **GEF Implementing Agency** for this Project. The Project built on UNDP's strong experience in Kazakhstan and in Central Asia with POPs and chemical management, promoting environmental protection, and building capacity of governmental organizations and the public. UNDP has conducted several

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projects in Kazakhstan in diverse subject areas, including energy efficiency in buildings and lighting; energy efficiency in municipal heating; development of the wind energy market; conservation of wetlands; protection of the Altai-Sayan forest ecosystem; support for democratic governance; and other areas.

UNDP's Country Office (CO) in Kazakhstan was responsible for ensuring transparency, appropriate conduct and financial responsibility. This office oversaw annual financial audits, as well as the execution of independent Midterm and Terminal Evaluations. All financial transactions and agreements, including contracts with staff and consultants, followed the rules and regulations of the United Nations. The UNDP/GEF RTA in the Regional Coordinating Unit provided regular programmatic and administrative oversight as well.

4. FINDINGS OF THE EVALUATION

Project strategy and relevance

Since its independence twenty-five years ago, the Republic of Kazakhstan has taken good strides in terms of social and economic development. This large land-locked country located at the heart of Eurasia attracts attention in the form of trade and investment from the West, East, North and South. Its engagement in multi-lateral diplomatic process (including 2010 Chairmanship of the OSCE, Shanghai Cooperation Organization, and OIC), shows its growing influence as a trusted international partner, including for championing global development agendas such as the Sustainable Development Goals (SDGs)³².

While Kazakhstan recently attained the status of a middle-income country, it remains facing with diverse environmental challenges including chemical pollutions. On this backdrop, it is important to note that the Government of Kazakhstan (GoK) has set an ambitious vision of the path to address these challenges, most notably with the adoption of the Concept and Action Plan on Transition to Green Economy of Kazakhstan³³ and "Strategy 2050". These documents signal the plans to shift to a principally new way of economic and social development. One of its priority objectives calls for launch of activities and information campaigns aiming at solving environmental problems to consistently improve living and health standards. The Strategy has further evolved into various country development and environmental programs and generally influenced national agenda on green development.

The implementation of the Strategic Plan's objectives is supported by a dedicated sectoral programme "Zhasyl Damu (Green Growth) as adopted by the Government's resolution #924 dated September 10, 2010. It is interdisciplinary program focused on the application of the principle of a progressive 'green economy' that minimizes environmental impact of the economic growth. It addresses many complex issues, including greenhouse gas emissions, air pollution, waste generation, water consumption, and protection of natural ecosystems.

Further, as a result such strategic decisions, the idea of green development has received much stronger attention from the Government and been promoted by Kazakhstan at national and global levels. The country submitted to the World Summit 'Rio+20' its regional'' Green Bridge' and 'Global Energy and Ecological Strategy'' initiatives which yielded wider support of the global community, and eventually were included into the conference's outcome document "The future we want".

The purpose of the "Green Bridge" initiative is to develop a practical, interregional mechanism to support green business development with promotion of environmentally sound technologies and investments. Its forward outlook is a voluntary mechanism to facilitate such transition by providing legislative, institutional, financial and other support for environmentally oriented businesses based on best practices. It further seeks to strengthen the integration between Europe, Asia, and Pacific regions, and emphasizes the importance of mitigation and adaptation to environmental changes, together with the need to eliminate (where possible) environmental damage where it has already occurred.

Kazakhstan is considering and working towards of its accession to the Minamata Convention and it would also bring the country in step with possible future developments under World Trade Organization (WTO), were Kazakhstan being a member since 30 November 2015.

Currently, Kazakhstan is also underway to ratify the Kiev Protocol on Pollutant Release and Transfer Registers (PRTR) and the Aarhus Convention on Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters. The ratification of the Kiev Protocol will foster the process of strengthening the management system of hazardous substances and wastes in a systematic and integrated manner, with a view to promoting human rights, including the right to information.

³² In 2017 Kazakhstan has conducted EXPO Future Energy.

³³ Concept of transition of the Republic of Kazakhstan to the "green economy" was approved by the Decree of the President of the Republic of Kazakhstan on May 30, 2013.

The Project objective is fully aligned with the strategies of the UNDP and the UN Country Team in Kazakhstan. Priorities of UNDP Kazakhstan reflects the emerging aspirations for the SDGs, as important parallels exist between the global post-2015 development agenda and Kazakhstan's 2050 strategy, which articulates a vision for the future that rests on core values of human rights, equity and sustainability. UNDP's Country Programme Document for 2016-2020 sets the Goal No.2. "Sustainable Human Settlements, and Natural Resources Management" and Partnership Framework for Development (PFD) sets the goal Ecosystems and Natural Resources are protected and sustainably used, and human settlements are resilient to natural and manmade disasters and climate change.

The long-term objective of the Project will contribute to: communities, national, and local authorities use more effective mechanisms and partnerships that promote environmental sustainability and enable them to prepare, respond and recover from natural and man-made disasters. Hence the objective of The Project was very relevant for Kazakhstan as the needs of central Government entities and regional governments (Akimats) for technical assistance matched very well with The Project's position to deliver it – and the potential for development chemical safety policies and measures seemed very high at the onset of the project, if the phase-out and the nation's associated plans were to be implemented successfully.

In this context, the main Outcomes of The Project contribute to addressing these above-mentioned development challenges.

4.1 **PROJECT DESIGN AND SCOPE**

The Project's Executing Agency/Implementing Partner role was initially assumed by the Ministry of Environmental Protection (MEP), which later became the Ministry of Environment and Water Recourses (MEWR) and finally became the Ministry of Energy (MoE).

The evidence suggests that both the capacity of the executive partner, MoE, and other partners as well as partnership mechanisms were adequately considered during project design. Despite the restructuring in 2010, MoE was best positioned to perform the role of the Project's implementing partner in the government, as it was entrusted with the medical POP and HCWM. During the design stage, the Ministry of Environmental Protection (MEP), which later became the Ministry of Environment and Water Recourses, retained a major role, although not as the nominal national implementing partner. A series of workshops and face-to-face consultations with government, local authorities and academic institutions resulted in the assessment of, and recommendations for, their involvement in the project execution. As a result, the Project strategy included joint activities on policy and legal issues, standards design, etc. Beyond this, consultations with NGOs were conducted including numerous bilateral consultations with other international projects and agencies. This consultation allowed for understanding and detailing the cooperation with local governments for coordinating arrangements for pilot projects in remote areas and big cities.

Direct Objective: To reduce the releases of unintentionally produced POPs and other globally harmful pollutants into the environment by promoting sound healthcare waste management in Kazakhstan, and to assist the country in implementing its relevant obligations under the Stockholm convention.

It includes the following four (4) indicators:

- 1. Update of the National Implementation Plan (NIP) on Stockholm Convention is prepared and coordination on chemical MEAs is enhanced.
- 2. Mercury inventory and Reduction plan prepared.
- 3. POPs emissions from healthcare waste incineration are reduced through a demonstration component, and wider replication of results.
- 4. Mercury waste generated by the health sector is managed soundly and future waste is minimized

Now, the Government aims efforts at creation of legal, institutional and economic conditions for raising effectiveness of natural resources use and environmental improvement. Decrease of negative impact of

chemical materials and hazardous wastes to the environment and increase of waste, which are involved to the waste recycling.

Since 2013-year Kazakhstan is promoting "green" development among the most important state priorities by accepting the strategic document of state environmental policy - Conception of Kazakhstan On Transition to Green Economy and Defined Environment Protection. One of the priority areas of this document is development of national policy on production and consumption waste management, as well as improvement of legislative machine of chemicals regulation. As of today, the issues of identifying industry producing new POPs, as well as POPs monitoring system and measures on reduction of uPOPs, minimization of uPOPs through improvement of healthcare waste treatment, and regulation of mercury management issues are very important in line with the current Government policy. Therefore, the choice of the four (4) Project Outcomes was, and is still very relevant, and the choice of the planned outputs/strategies is overall relevant as it was showed by the experience during the past 4 years of The Project, as well as the interviews conducted in the framework of the current TE, highlight the areas under each Outcome have been well designed with minor issues responded and corrected by the Project Management during the implementation process. This is best discussed along the four (4) Outcomes:

Outcome 1: Stockholm Convention NIP update and improved institutional coordination on chemical MEAs

This component planned to tackle 12 main areas:

- 1. Capacity building programme (trainings) for involved stakeholders developed and implemented on POPs risks, inventories, POPs tracking, monitoring of data reported by responsible parties;
- 2. National information system (inventory) on POPs expanded (updated information on uPOPs and new POPs);
- 3. Studies on existing POPs analytical and monitoring capabilities for the whole range of POPs (with focus on new POPs) carried out;
- 4. A set of recommendations for the improvement of such capabilities formulated and submitted to the Government;
- 5. Institutional coordination and compliance with international agreements improved through firmer institutionalization of POPs issues into national structures;
- 6. National legal framework, by aligning institutional roles, reviewed and improved to include the issue of insofar unaddressed POPs, uPOPs and new POPs;
- 7. Sectoral technical guidelines updated to include the issue of priority POPs, including sampling and analysis methods;
- 8. Capacity building programme (trainings) and consultations for involved stakeholders developed and implemented on POPs related risks, POPs monitoring, institutional roles and responsibilities, POPs control legislation benchmarks and enforcement;
- 9. National Implementation Plan (NIP) on Stockholm Convention obligations with inclusion of new POPs reviewed and updated, with elaboration of specific action plans on new POPs;
- 10. Review and better alignment of ministerial functions on implementation of Conventions' obligations;
- 11. Establishment of coordination mechanisms to support synergistic implementation of Stockholm, Rotterdam and Basel Conventions and established framework (system) for monitoring, accountancy and reporting on the implementation of the Stockholm, Basel and Rotterdam conventions in Kazakhstan;
- 12. Capacity of government authorities on implementation of chemical conventions improved.

The following risks and assumptions has been designed for the Outcome 1:

- 1. Technical resource for conducting training is available;
- 2. There is enough motivation to participate in training;
- 3. Few participants in training sessions; training not effective;

- "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan"
- 4. Lack of cooperation of data collection teams with information holders;
- 5. Resources and technical capacities, including technical assistants, are qualitatively and quantitatively enough for conducting a thorough inventory;
- 6. Lack of coordination and motivation may lead to incomplete results / coverage of the inventory;
- 7. Insufficient funding and institutionalization are a risk to the establishment of a permanent inventory mechanism;
- 8. Data limitations and non-responsiveness from respondents;
- 9. Weak analytical equipment at laboratories does not allow upgrades, only investment in new tools;
- 10. A small number of interested and supporting laboratories identified limits project's activities;
- 11. National partners lack interest and funding for POPs monitoring;
- 12. Interested laboratories are easily identified and agree to participate through co-finance;
- 13. Cost of accreditation too high;
- 14. Sampling cost too high for wider acceptance;
- 15. GoK is committed toward the implementation of a sound and integrated mechanism for the management of POPs;
- 16. Environmental and social impact review of proposed legislation is timely and successful;
- 17. Public consultations are positive and supportive of proposed legislation;
- 18. Time required for approval of new regulation through parliamentary bodies exceeds timeframe of the project;
- 19. Sufficient technical and financial resources made available;
- 20. In consultation process, guidelines become too general or not sufficiently tailored to the country needs;
- 21. Guidelines are not approved for endorsement at the governmental level;
- 22. Stakeholder collaboration;
- 23. Trained stakeholders are prepared and apply received knowledge in daily functions;
- 24. Consultations are as wide as possible for priority setting;
- 25. Difficulties in reach agreement on NIP content and objectives;
- 26. Lack of commitment, of one or more partners could result in a not properly coordinated effort and in a weak NIP update;
- 27. Mobilization and agreement of stakeholders to support the function alignment;
- 28. NGOs participate in the review process;
- 29. Delays in reviewing and approving legislation;
- 30. No financial backing to the mechanism agreed with the Government;
- 31. Roles and responsibilities are not clear.

The relevance for these selected strategies and assumptions under this component was confirmed during the interviews and in the third-party reports.

Outcome 2 Overall mercury situation assessed and initial mercury reduction and containment plan formulated.

The outcome was covering the following 4 areas:

- 1. Capacity building program (trainings) for involved stakeholders developed and implemented on mercury risks, inventories, sources, data tracking;
- 2. Mercury situation in Kazakhstan assessed in coordinated manner jointly with UNEP;
- 3. Outline of National mercury reduction plan developed;
- 4. Public awareness raising campaigns on mercury risks conducted.

The following assumptions has been designed for the Outcome 2:

- 1. Willingness of private sector to participate;
- 2. Government's support to the capacity building programme;

- 3. Cooperation on data access is low;
- 4. Lack of suitable legislative framework on data reporting;
- 5. Data quality is low;
- 6. Delayed consultation and clearance process with line ministries and important stakeholders;
- 7. Publication materials are developed and available;
- 8. Existing funding limitations.

Outcome 3 Minimization of unintentional POPs and mercury releases in selected hospitals through demonstration of sound Health-care Waste Management approaches

The following 6 (six) areas were considered under this Outcome:

- 1. Review of national policies and update of HCWM regulatory framework and road map;
- 2. Development of Regional HCWM Management Plan in selected provinces;
- 3. Pilot HCWM projects in selected hospitals, including phase-out of mercury containing thermometers;
- 4. Establishment of HCW treatment centers in selected sites;
- 5. Development and dissemination of BAT/BEP technical guidelines and general awareness raising;
- 6. Development of national training programs on uPOPs/mercury risks and sound HCWM, partnership with stakeholders and national replication of BAT/BEP demonstration.

The "Minimization of unintentional POPs and mercury releases in selected hospitals through demonstration of sound Health-care Waste Management approaches" Component planned to tackle 2 main areas: (1) Sound health-care waste management through uPOPs and mercury reduction approaches are demonstrated in 2-3 regions of the country and (2) Linkages between sound HCWM practices and minimization of uPOPs and mercury demonstrated through training and awareness raising programs. The following risks and assumption has been designed for the Outcome 3:

- 1. Drafting and final approval of proposed legislative changes are delayed;
- 2. Sufficient political support to pass and enforce the standard;
- 3. Initial resistance to comply with new regulations Installations that do not comply with the emission standard are gradually removed from operation;
- 4. Batch type burners are removed from consideration as final solution and gradually reduced from use;
- 5. Current pricing policy is easily adjustable to optimize the work of the HCWM system;
- 6. Low political will, no interest and resistance from regional authorities;
- 7. Limited cooperation from public and private sector;
- 8. Parallel improvements in legislation and control measures;
- 9. The plan serves as a model for replication within the country;
- 10. Business as usual' approach no planning is carried out or/and the Plan is abandoned;
- 11. The lowest price criterion is dominant;
- 12. Significant adoption of EPP is beyond the project time frame;
- 13. No services exist for MSW recycling and/or safe disposal of chemicals;
- 14. Improved planning on the regional level allows fostering and developing waste disposal services;
- 15. Business as usual' approach dominates despite project's efforts;
- 16. Improved planning on the regional level allows fostering and developing waste disposal services;
- 17. Resistance to new approaches from existing private HCW treatment initiatives;
- 18. Cost effectiveness of non-combustion methods attracts private and public investors;
- 19. Required partnerships are developed and support to the process secured;

- 20. Stakeholder participation is ensured;
- 21. Media support is expected on a wider scale;
- 22. Required partnerships are developed and support to the process secured;
- 23. Stakeholder participation is ensured;
- 24. Media support is expected on a wider scale.

Outcome 4. Monitoring, learning, adaptive feedback, outreach, and evaluation.

Two assumptions have been designed for this component: (1) Availability of reference material and progress reports and (2) Cooperation of stakeholder agencies and other organizations. The relevance for these two assumptions was confirmed during the interviews and in the third-party reports.

4.2 INSTITUTIONAL SET-UP AND MANAGEMENT ARRANGEMENTS

The Ministry of Environmental Protection (MEP), which was listed in the PIF as one of the original national implementing partners, ceased to exist in 2010, upon government restructuring. Responsibilities regarding chemical management were transferred to the new Ministry of Environment and Water Recourses (MEWP). Then, further reorganization of the Government of Kazakhstan led to the dissolution of MEWP, with most of its key functions, including those related to POP management, transferred to the MoE. The MoE thus became the national implementing partner of the project.

Overall, the project roles (Project Board, Project Manager (PM) and UNDP CO roles and responsibilities) are properly distributed in the Project Document and comply with the UNDP and GEF guidance.

Throughout this process, the essential functions of the national implementing partner continued without interruption. Notably, key committees and departments dealing with chemical management continued to respond essentially to the same chain of command. The same person **Ms. Bizara Dosmakova** served throughout the project lifespan from its design until the end as **National Project Director (NPD)** on behalf of MEP, MEWP and MoE and all the time in the capacity of Deputy Director of Department of Waste Management of the mentioned three organizations: MEP, MEWP and MoE. Therefore, at the level of personnel as well as the agency itself, communication between project staff and the NPD also remained steady throughout the whole project period, within and outside business hours.

The NPD was aware of the importance of the project, and its great potential not only to reduce POPs, but also to build capacity of professionals and officials, and to bring Kazakhstan in line with international best practice about medical POP and HCWM. The NPC spearheaded the development and reconciliation of proposed regulatory content with other agencies. She also provided interagency coordination of working plans, expedited signing of financial documents, participation in important project events, and monitoring of pilot projects in Kazakhstan 3 areas.

The Project's full-time office was housed in Astana near the UN Building and The Project had a wide presence throughout the whole country via the presence of MoE offices in every region of the country, as well as travel by the full-time staff. The NPD greatly facilitated interactions and agreements with Akimat's agencies, even engaging the executive authority at the higher levels when certain proposed actions required such high-level approval. It appears that excellent inter-relationships were established between the three parties, PMU, UNDP CO and MoE.

The Project implementation strategy was developed considering international experience (e.g. that of the GEF and UNEP) and was based on experience from similar UNDP-supported, GEF-funded projects POP projects implemented and under implementation in Russia and Central Asia. The design of the project

"NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan" benefited heavily also from several UNDP-supported, GEF-funded projects implemented in Kazakhstan. For example, the partnership with the UNDP/GEF project on Energy Efficient Lighting was important for exchange experience for the mercury reduction programme.

During the Inception Workshop³⁴ on 29-30 April 2014, the Project Management has decided to do not establish a **Technical Advisory Committee**. The reason for this decision was that number of experts on the issues the project addresses was limited, and majority of them had been engaged in various ministerial groups who assisted in the development of updated legal framework, and resultant programs. Therefore, the project would utilize these ministerial expert groups when needed and possible, instead creating its own. Regardless of this decision (see: The Minutes of the Inception Workshop) the Technical Advisory Committee was anyway established by the Project Management after 6 (six) months at 27 November 2014. The main target of the Advisory Technical Committee is consultations and recommendations in various areas of the project. The Technical Advisory Committee met only once at 6 July 2016. Evaluator did not receive any documented explanation of the decision to establishing the mentioned Committee after the Inception Workshop's decision do not do it. Nevertheless, Technical Advisory Committee as well as the board played a vital role in the continued success of project technical activities. The members of the Committee were actively involved in the work as consultants on a routine basis throughout the whole project implementation. All technical documents were reviewed by the members of Technical Advisory Committee. The relevant advices and assistance on issues relevant to the project work were provided by the TAC.

The implementation approach uses the Nationally Executed (NEX) modality. This was realised in a competent manner, with the appointment of staff to create a **Project Management Unit (PMU)** that was independent of but answerable to the client (MoE) and both supported and overseen by the implementing agency (UNDP CO). Aside from the relevant project design, another major asset of the project was its implementation team, led by the **Project Manager, Ms. Nina Gor**. Ms. Gor oversaw all aspects of project management, including hiring and supervision of other staff and consultants; strategy, work planning, and monitoring of progress; representation of the project in contacts with partners, media, and the public; and budgetary, financial, and administrative matters. In all these aspects, Ms. Gor was assisted full-time by **Project Assistant, Ms. Zulfiya Baisagatova** and by **Procurement Assistant, Ms. Madina Kassenova** with support from the UNDP Country Office³⁵ and the UNDP/GEF Istanbul Regional Hub.

The full-time Project Team also included a strong and diverse set of technical specialists, including **Expert** on Healthcare Waste and Mercury Pollution Management, Ms. Assel Shakhanova and Expert on Capacity Building in the Field of Persistent Organic Pollutants and Other Harmful Chemical Substances, Ms. Saltanat Bayeshova. Ms. Bayeshova also led the project's extensive work in generating printed media, videos, print publications, and television coverage. The Project has full-time driver and project car.

4.3 PROJECT IMPLEMENTATION, ROLE OF UNDP AND FINANCIAL MANAGEMENT

The support role of UNDP, as the Implementing Agency through its Country Office and RTA, has been sustained and effective throughout current project implementation, undoubtedly contributing significantly to the achievements. Its support has been particularly beneficial on a number of occasions, including the initial selection of PMU staff (jointly with MoE) through an open application process, regular monthly meetings with the Project Manager to formally review project achievements and project implementation strategy, and the RTA challenging the project's pace related to establishment of pilot project monitoring and evaluation

³⁴ See: "Inception Report. NIP update, integration of POPs into national planning and promoting sound healthcare waste management in Kazakhstan. May 2014".

³⁵ See 4.3 PROJECT IMPLEMENTATION, ROLE OF UNDP AND FINANCIAL MANAGEMENT

"NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan"

framework, collection and analysis of baseline data, selection of pilot projects for demonstration and replication.

At the time of project design, formulation and inception The Project Team was working under supervision of Mr. Stanislav Kim, Head of Environment and Energy Unit, UNDP CO. Later from January 2015 to January 2016 he was replaced by Mr. Rassul Rakhimov, Programme Analyst/Head of Sustainable Development/Urbanization Unit. Since late January 2016 The Project team worked under the support and direct oversight of the Programme Associate of UNDP's Sustainable Development/Urbanization Unit, Ms. Victoria Baigazina. Handover notes between staff has not been found in The Project and unit files and therefore were not identified by the Evaluator.

As a general observation, UNDP CO has made use of the available tools for monitoring. The effectiveness of annual work plans and budgets, as a tool for monitoring and planning, was maintained throughout the lifespan of The Project. The monitoring and evaluation (M&E) plan of The Project is overall adequate for following up the outcomes and progress assessment in the achievement of project objectives. To clarify, this statement applies to the revised M&E plan of The Project contained in the Inception Report, which had addressed some of the issues present in the Project Document. The M&E plan includes:

• midterm and end-of project targets, (mostly) SMART³⁶ indicators and potential data sources;

• provisions for updating National plan of Implementation of Stockholm Convention on persistent organic pollutants particularly concerning new POPs, including:

-Assessment of POPs monitoring international system;

-Preliminary analysis of new POPs use and import;

-Identification of industrial sources of uPOPs;

-Identification of sectors using new POPs (sectors processing waste that contains new POPs);

-Assessment of POPs monitoring system;

-Development of new POPs inventory plan;

-Recommendations on new POPs use and import;

-Preparation of preliminary text of new NIP chapters dealing with new POPs (budgeted).

• requirements for MTE and final evaluation (budgeted).

In addition to routine progress monitoring exercised by UNDP CO, The Project has been supported by Ms. Zhanetta Babasheva, UNDP Resource Monitoring Associate, to meet UNDP procedures and accounting requirements. UNDP has several instruments at its disposal for project monitoring and steering, as well as for evaluating progress and results, including:

- Project inception workshop and report;
- Annual reporting (APR, PIR);
- Quarterly progress reports;
- Annual work plans and budgets;
- Project Board meetings;
- UNDP field visits to the project;
- Mid-term and terminal evaluations; and
- Ad-hoc evaluations and expert missions.
- Atlas issue and risks logs

UNDP CO team of Sustainable Development Unit, the Project Team and teams of other UNDP-supported GEF-financed projects have, through their work, positioned UNDP in Kazakhstan as a highly recognized local expert organization. All key project stakeholders, including governmental agencies, appreciate UNDP not only as a source of funding but as a source of professional expertise in POPs management.

The Evaluator found the local counterparts and the UNDP Country Office highly committed to The Project. UNDP made available office staff and financial resources. The Evaluator observed constructive working

³⁶ Specific – target a specific area for improvement; Measurable – quantify or at least suggest an indicator of progress. Assignable – specify who will do it; Realistic – state what results can realistically be achieved, given available resources. Time-related – specify when the result(s) can be achieved.

relations between UNDP and the national counterparts. The implementation approach uses the Nationally Executed (NEX) modality. This was realised in a competent manner, with the appointment of staff to create a Project Management Unit (PMU) that was independent of but answerable to the client (MoE) and both supported and overseen by the implementing agency (UNDP CO). The Project cooperated with another UNDP supported and GEF financed Project "Promotion of Energy-efficient Lighting in the RK" on development of "Overview of Legislative and Regulatory Requirements Concerning Regulation of Mercury Lamps and Mercury Containing Wastes" as well as on drafting "Standard Rules of Handling Waste Mercury Lamps" in 2014.

As for the implementing partner, it appears that excellent inter-relationships were established between the three parties, PMU, UNDP CO and MoE, as observed during MTE and this TE. The Deputy Director of the Department of Waste Management of MEP, **Ms. Bizara Dosmakova** was appointed as **the National Project Director and Chairman of the Project Board** in April 2014. Following internal changes in Government, Ms. Bizara Dosmakova was re-appointed as Project Director. Finally, after yet another restructuring in the Government in August 2014, the project was moved to the newly established Ministry of Energy of the Republic of Kazakhstan, and Ms. Bizara Dosmakova, Deputy Director of the Department of Waste Management of the MoE was again re-appointed as the project's National Director and Chair of the Project Board (PB)³⁷. Despite these seemingly unfortunate changes in the government, MOE was a successor of MEWP and most of its staff remained in the new ministry. Also, in the end, the project benefited from having a higher-level government. The PB, led by its Chairman, took a keen interest in the implementation activities and supported PMU on several critical occasions, such as amendments to the regulations, selection of pilot sites.

Development assistance is an integral part of the Kazakhstan's foreign policy that contributes to the achievement of its objectives and supports its national security through effective partnership, enabling poor and undeveloped nations to realize their development goals. Recent Kazakhstani initiatives, such as the establishment of the national system of Official Development Assistance (ODA), indicates an intention to deliver solid expertise and aid to recipient countries, and bring up the developmental agenda from sporadic bilateral interactions to a new level of systematic and well-structured aid programs/projects. To promote peace and security, to date Kazakhstan has provided an estimated more than \$100 million worth of humanitarian and development aid to other countries. To strengthen its role as an emerging donor, Kazakhstan intends to systematize and professionalize its efforts and align ODA with its foreign policy. The country is working to create the Kazakhstan Agency for International Development with the purpose to expand the geographical and thematic dimensions, types and formats of technical assistance to the countries in need. In December 2014, Kazakhstan adopted a law on ODA. Through joint projects with UNDP and other organizations in the major aid recipient countries - Afghanistan, Tajikistan and Kyrgyzstan, the Kazakhstan's ODA has outlined a course aimed at obtaining the know-how in development assistance and improving the skills of the administration. Subsequently, UNDP and the MFA have launched a project to support establishment of the ODA system. Assisting an expert support, the project provides an analysis of the best international experience and situation on ODA of new donors, shows the common threats and problems, although searches the effective decisions.

 Table 1. Project Summary of UNDP-supported GEF-financed project "NIP update, integration of POPs into national planning and promoting sound healthcare waste management in Kazakhstan"

³⁷ The PB was established and held its first meeting on April 30, 2014. It consists of representatives from the following bodies: Ministry of Energy, Ministry of Public Health, Ministry of Education, Ministry of Defense, Ministry of Industry and New Technologies, Ministry of Agriculture, Agency for Consumer Protection, NGO, and a waste management business.

	"NIP Update, Integration of POPs into I	National Planning and Promoting Sound He	ealthca	re Waste Management in Kazakhs	tan"				
Project Summary of UNDP-supported GEF-financed project "NIP update, integration of POPs into national planning									
and promoting so	und healthcare waste man	agement in Kazakhstan"							
GEF Project				<u>at endorsement</u>	at completion				
ID:	#4442			(Million US\$)	<u>(Million US\$)</u>				
UNDP Project	00085149 (PIMS	GEF financing:			3,400,000				
ID:	#4612)		3,4	00,000					
	00071893 (Atlas ID)								
Country:	Kazakhstan	IA/EA own:							
Region:	RBEC/CA	Government:	34,	315,820	34,315,820				
		UNDP:	75,000		75,000				
		UNDP (in-kind):	100,000		100,000				
Focal Area:	Persistent Organic	Other:			521,938				
	Pollutants CHEM-1,		521	l ,938					
	3, 4								
FA Objectives,		Total co-financing:			35,012,758				
(OP/SP):			35,012,758						
Executing		Total Project Cost:	20 410 550		38,412,758				
Agency:			38,	412,/58					
Other Partners	Ministry of Energy of	ProDoc Signat	ure (22.10.2013					
involveu.	RK	(Operational) Closing Da	ate:	Proposed:	Actual:				
				30.09.2017	30.09.2017				

Financial management

The total budget in the Project Document was US\$ 38,412,758, of which US\$ 3,400,000 (8.9%) was grantaided by GEF³⁸ and US\$ 34,837,758 co-financed by city governments and healthcare entities and NGOs (90%). Total project budget and work plan (Section III of the approved Project Document) includes US\$ 38,412,758, of which GEF resources accounts for 3,400,000 US\$ and 75,000 US\$ of UNDP TRAC. The original planned budget is shown in Table 4 below.

Table 4: Annual project budgets as in approved Project Document, 2013-2017, in US\$

Project Outcomes	Year 1	Year 2	Year 3	Year 4	Total	% Total Budget by Outcomes
Outcome1:StockholmConventionNIPupdateandimprovedinstitutionalcoordination on chemical MEA	82,500	100,000	82,500	110,000	375,000	11%
Outcome 2: Overall mercury situation assessed and initial mercury reduction and containment plan formulated	79,000	72,000	21,000	28,000	200,000	6%
Outcome 3: Minimization of unintentional POPs and mercury releases in selected hospitals through demonstration of sound	231,700	1,817,300	151,600	299,400	2,500,000	72%

³⁸ GEF grant for PPG amounted to 77,000 US\$ with matching co-financing of 90,000 US\$ from the government.

NIP Opdate, Integra	NIP Opoate, integration of POPs into National Planning and Promoting Sound Healthcare waste Management in Kazakhstan					
Project Outcomes	Year 1	Year 2	Year 3	Year 4	Total	% Total Budget by Outcomes
Health-care Waste Management approaches						
Outcome 4: Monitoring, learning, adaptive feedback, outreach, and evaluation	29,750	50,500	23,250	51,500	155,000	4%
Project						
Management	51,060	65,960	66,140	61,840	245,000	7%
Unit						
GEF	44,060	40,960	41,140	43,840	170,000	
UNDP	7,000	25,000	25,000	18,000	75,000	
Total	474,010	2,105,760	344,490	550,740	3,475,000	
% of Total Budget by Yr	13%	61%	11%	15%		

Each year a new annual budget has been prepared for the next year and submitted for approval to the Project Board in the form of Annual Work Plan. These annual budgets as shown in AWPs are summarized in below in Table 5. By the end of the Project it does not go beyond the permitted threshold of 10%. The main disbursements were done in procurement area, thus in Outcome 3 - the contractual services make up for 72.7%, in the Outcome 1 – the contractual services make up 13%, and expenses in the Outcome 2 – make up 6.4% and in the Outcome 4 – the M&E work make up 5.4%.

Table 5: Annual proj	ect budgets as appro	oved by Project Boa	rd, in US\$, 2013-2017
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Project Outcomes	2013	2014	2015	2016	2017	Total	% of Total Approved Budget per Outcome
Outcome1:StockholmConventionNIPupdate and improvedinstitutionalcoordinationonchemical MEA	0	136 900	133 580	134 300	47 200	451 980	13%
Outcome 2: Overall mercury situation assessed and initial mercury reduction and containment plan formulated	500	70 000	61 300	55 300	35 230	222 330	6,4%
Outcome3:MinimizationofunintentionalPOPsandmercury releasesinselectedhospitalsthroughdemonstrationof	0	220 200	388 090	1 346 700	569 600	2 524 590	72,7%

"N	"NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan"									
sound Health-care										
Waste Management										
approaches										
Outcome4:Monitoring, learning, adaptive feedback, outreach, and evaluation	0	40 000	12 070	32 585	103 850	188 505	5,4%			
PMU:	3 000	46 600	41 140	42 400	41 416	174 556	5%			
GEF	3 500	513 700	611 180	1 586 285	685 335	3 400 000				
UNDP	0	25 000	25 000	25 000	0	75 000				
Total	3 500	538 700	636 180	1 611 285	797 296	3 475 000	100%			

Annual budget and disbursements are typical of a normal project cycle, with a lower allocation in the first year while the Project got up to speed in the fourth quarter, establishing the necessary infrastructure, contracting staff and consultants etc., following by years of higher investments (Table 6) Total project expenditures over the project implementation period, October 2013 - September 2017, are US\$3,468,522, of which GEF resources account for US\$ 3,400,000 and UNDP TRAC resources for US\$68,522 (91.36%). The unspent balance of TRAC resources is 6,477.01. The balance is the savings stemmed from KZT devaluation in 2015 and KXT fluctuation in 2016. The highest amount of disbursement has been done in 2016 – US\$1,392,102 and in 2017 – US\$998,387.

Table 6: Annual project disbursements by outcomes, 2013-2017

Project Outcomes	2013	2014	2015	2016	2017	Total	% of Total Approved Budget
Outcome1:StockholmConventionNIPupdate and improvedinstitutionalcoordinationonchemical MEA	0	113,160.01	216,184.11	130,434.80	47,200	506,978.92	14,59%
Outcome 2: Overall mercury situation assessed and initial mercury reduction and containment plan formulated	0	70,116.03	57,216.51	54,539.58	35,230	217,102.12	6,25%
Outcome3:MinimizationofunintentionalPOPsandmercury releasesinselectedhospitalsthroughdemonstrationof	0	217,784.67	279,632.77	1,132,966.48	770,270.83	2,400,654.75	69,08%

"N	Terminal Evaluation of UNDP-supported GEF-financed Project "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan"								
sound Health-care Waste Management approaches		~							
Outcome4:Monitoring, learning, adaptivefeedback,outreach,andevaluation	0	38,809.25	4,843.19	32,455.68	103,850	179,958.12	5,18%		
PMU:	420.24	42,734.97	37,552.41	41,705.46	41,416	163,829.08	4,71%		
GEF	420.24	482,604.93	550,623.19	1,368,384.81	997,966.83	3,400,000			
UNDP	0	25,000	19,805.78	23,717.21	0	68,522.99			
	420.24	507,604.93	570,428.97	1,392,102.02	997,966.83	3,468,522.99			

The project was subject to two financial audits in 2014³⁹, and 2016⁴⁰ as project exceeded its annual expenditures the threshold of US\$600,000. All two financial audits had "no comments or observations" and provided the overall satisfactory rating across the following audit areas: (i) review of project progress; (ii) human resources; (iii) finance; (iv) procurement; (v) asset management; (vi) cash management; (vii) general administration; (viii) information systems; (ix) follow-up on previous audits. The audits confirmed that the project has been implemented in accordance with UNDP accounting requirements.⁴¹

4.4 PROJECT RESULTS

GEF Tracking Tool (TT)

As the GEF tracking tool used during development of the ProDoc has been updated in June 2015 the current GEF-VI Waste and Chemical Tracking Tool is used. In the Tables below the Project results are presented and summarized, which are relevant for the indicators set in this GEF Tracking Tool.

The evaluator reviewed 3 PIRs for 2015, 2016 and 2017 (draft) and found that they provide concise information on project progress, management, and achievements and prove success in reaching multiple stakeholders and beneficiaries over the project implementation. Two PIRs for 2015 and 2016 were rated as satisfactory with risk rating changed down from "high" in 2015 to "low" in 2016 mainly due to efficient risk monitoring and adaptive actions of the project team. Draft of the last PIR for 2017 was under consideration by GEF at the time of TE.

Outcome 1:

The National Implementation Plan (NIP) was updated on new POPs and on uPOPs. A comprehensive assessment of the legal framework is available and recommendations to the relevant Governmental body provided. The coordination on chemical MEAs is handed over to Zhasyl Damu which is part of the Ministry of Energy. Due to the intersectoral approach of the Multilateral Environmental Agreements (MEAs) implementation Zhasyl Damu

³⁹ This audit report covers years 2013 and 2014 of cumulative spending of 600,000 US\$ and above. Financial audit report and management letter. Audit report of the Project "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan" (1 January 2013-31 December 2014). Fabel, Werner & Schnittke GmbH

⁴⁰ Financial audit report and management letter. Audit report of the Project "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan" (1 January to 31 December 2016). Fabel, Werner & Schnittke GmbH

needs further comprehensive legal competencies to fulfill the duties on intersectoral level. Overall POPs regular inventory mechanism is not yet completely developed due to insufficient laboratory capacity, standards for reporting, and deficient sampling data. At the same time, interviewed organizations and the Government expressed clear intentions to include POPs into national monitoring system of hazardous chemicals. This will naturally take longer than a project lifetime, due to reasons that are beyond the Project's mandate and capacity. It is anticipated that Zhasyl Damu Information Center will serve as a central data base for statistics, technical reports, and Environmental International Agreements (EIA) related documents. A significant achievement in the implementation period is introduction of amendments to the Environmental Code regarding establishing standard emissions of dioxins and furans.

Indicators	Implementation Status ⁴²	Comments			
NIP coordinating mechanism in place ²	1	Together with JSC "Zhasyl Damu", preparatory work is carried out on creation of the National Coordination Center of the Republic of Kazakhstan on persistent organic pollutants (hereinafter - POPs NCC). The Draft Resolution of the Government of the Republic of Kazakhstan on the establishment of the POPs NCC is under the approval stage. The regulations on the National Coordination Center have been developed			
Inventories undertaken ³	1	Inventory of POPs has been completed. Comprehensive report, including recently updated information and statistical data has been prepared in 2016 and is distributed among stakeholders			
Draft updated NIP prepared	1	NIP update on new POPs finalized and the update of NIP on u-pops has been initiated – the submission is planned for 2017.			
Updated NIP submitted to the Stockholm Convention	1	The updated National Implementation Plan on new POPs for 2015- 2028 was approved by decree of Ministry of Energy # 228 dated 30/12/2014. It was submitted to the Ministry of Foreign Affairs to be presented to the Secretariat for the Stockholm Convention.			

Table 7. GEF	Waste and	Chemical	Tracking	Tool.	Update i	n Status	of NIP.
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Two laboratories for accreditation were identified in the East-Kazakhstan and North-Kazakhstan branches of the RSE "Kazhydromet". Recommendations for accreditation of laboratories have been prepared. Since at present the expansion of the field of laboratory accreditation for dioxins and furans is not possible due to the lack of expensive highly sensitive equipment, the laboratory of East Kazakhstan has carried out activities to prepare the accreditation of the laboratory for other POPs-POPs pesticides (Alfa - HCCH, 4,4-DDE, 4,4-DDD, 4,4-DDT), the analysis of which is possible on the currently available equipment.

Jointly with the United Chemical Company LLP (branch of Samruk Kazyna), negotiations are underway to establish a Center for Chemical Safety based on Nazarbayev University, which includes funding for the identification of the entire spectrum of POPs and uPOPs. On request of United Chemical Company LLP, a technical specification for the laboratory equipment of this Center was developed by the Project. By September 2017, it is expected that United Chemical Company LLP, would purchase laboratory equipment with subsequent accreditation.

 $^{^{42}}$ 0 = Not applicable: not an objective of the project; 1 = Indicator not considered; 2 = Indicator considered and partly conducted; 3 = Indicator fulfilled.

Outcome 2

The ProDoc stipulated that the Component 2 to be jointly carried by UNDP and UNEP. The UNEP's part was expected to be financed by GEF as well. However, due to adoption of the Minamata Convention on 19 January 2013, GEF's eligibility criteria have changed and allowed to finance mercury focused projects in countries that are signatories of the Convention only. Therefore, UNEP's regional project on mercury, including Kazakhstan, Belarus and Russia, had been put on hold. Although it was no longer expected that the organization will be able to implement it within time frame of this Project lifespan.

The work on total mercury assessment, that has been carried out in accordance with the methodology, prepared by UNEP, aimed at achieving the goal of adopting a decision on signing the Minamata Convention by the country. An agreement to refuse the use of mercury thermometers in the healthcare system has been signed with the health authorities of RK in the pilot regions. The introduction into the legislation of the Republic at the end of 2015 of the principle of "extended producer obligations" and the inclusion, with the direct participation of the Project in 2016 of mercury-containing lamps and thermometers, in the List of Products (Goods) to which it is distributed will prevent formation and solve the problem of collecting and processing mercury waste. Plan for Reducing the Use and Collection of Mercury was developed and submitted to the Ministry of Energy for final approval. The Project provided expert support for the inclusion of the Minamata Convention in the Perspective Plan for Concluding International Treaties of the Republic of Kazakhstan for 2017-2019. This means that the country plans to ratify the Minamata Convention and the Project can be credit for this. The implementation of the new UNDP-GEF Project "Initial Assessment of Minamata for Kazakhstan", signed in July 2017, will help in resolving this issue.

Outcome 3

There was a large variety of the activities related to public awareness raising and training on the management of POPs, medical waste and state procurement for different audiences including scientists, NGOs and professionals.

The process of selection of pilot regions was initiated at the Inception Workshop by the Project Manager who informed participants about possibility to apply for co-operation. Right after the Workshop, an official letter was distributed to regions on behalf of MEWR. The deadline for expression of interest by local authorities was set to May 27, 2014. Selected regions were announced by the end of May, and an initial visit to them conducted in June 2014. According to the Minutes of Project board dated 29 May 2014 three regions were selected for outcome 3 implementation –East-Kazakhstan and Kostanay region, Astana city.

Memorandums of Understanding of the pilot project on opening Centers for the Management of Medical Waste were signed with the local government authorities of the selected regions. Also, hospitals were selected in the mentioned regions (in total 8: 2 in Astana city and 3 in the each of other two regions) to conduct a baseline assessment of healthcare waste management. Also, national consultants of selected regions collecting data for analysis and assessment over the regions in the field of HCW handling. The commissioning and opening of the Centers for the Management of Medical Waste took place in March 2017. Currently, the Centers are not being loaded at full capacity, due to the process of participating in competitions and concluding contracts. Before the completion of the project, the Centers will begin to operate at full capacity. The volume of treated waste will be 1,250 tons per year. The volume of uPOPs in emissions will be decreased to 16.7 g TEQ/a, in bottom ash - g TEQ/a.

"NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan" **Table 8. GEF Waste and Chemical Tracking Tool: Reduction of POPs and Mercury**⁴³.

Indicators	Quantity (tons)*		Cost (US\$ /	Comments	
	Project	Achieved	ton)		
Indicator 3.1: Amount and type of POPs eliminated or reduced	125,53 g TEQ	16,7q TEQ/year in ash residue – 0,1 q TEQ/year.	0	Until the end of 2017 the general volume of decontaminated wastes (in all existed equipment) consist 1,250 ton. Which will make lower uPOPs in wastes until 16,7q TEQ/year in ash residue – 0,1 q TEQ/year.	
Indicator 4.1: Amount of Mercury reduced	0,03681	0,0368	459,799	The project phased out 18042 mercury containing medical thermometer, which allows to achieve Project targets. Demercurization of the replaced mercury thermometers was made by LTD "Synap plus" (Almaty city, Kazakhstan). Demercurization technology - thermal desorption equipment (TDU) URL-2M. The recovered mercury is temporarily stored in an environmentally sound manner in the plant and subsequently be reused	

* Note: The ProDoc refers to gram Total Equivalence Factor (TEQ) for the reduction of POPs

To reduce emissions of mercury 18,042 mercury-contained thermometers have been replaced for electronic ones in healthcare facilities of the pilot regions. Although during MTE in 2016 the reduction of POPs by the usage of non-burn technology was assessed as behind the schedule the Project Team could try and complete the work of installation of non-burn technology equipment and commissioning it by July 2017.

Outcome 4.

The Project fully complies with reporting cycle and tools as required by UNDP-GEF guidance and reflected in the ProDoc. Apart from progress reporting to National Project Director (NPD) and GEF, the Project used the mandate of the Steering Committee to communicate its results within key governmental institutions and other stakeholders and to adapt to unexpected change in selected pilot hospitals and centers over the project course.

The evaluator reviewed 3 PIRs for 2015, 2016 and 2017 (draft) and found that they provide concise information on project progress, management, and achievements and prove success in reaching multiple stakeholders and beneficiaries over the project implementation. Two PIRs for 2015 and 2016 were rated as satisfactory with risk rating changed down from "high" in 2015 to "low" in 2016 mainly due to efficient risk monitoring and adaptive actions of the project team. Draft of the last PIR for 2017 was under consideration by GEF at the time of TE

Mainstreaming UNDP priorities:

One of the main objectives of the project is to create a national system for regulating POPs and mercury management, as well as sound management of healthcare waste. Nursing staff is mostly responsible for handling waste in healthcare organization. These are mostly women. Component 3 of the project is aimed at improving professional work standards for all employees of hospitals, in this case, most them are women. The project is also aimed at building capacity and awareness on managing persistent organic pollutants and mercury. Since women have the potential to deliver accumulated in their body chemicals to children these

⁴³ See also Annex 12

"NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan" issues were given special attention during training sessions and seminars. Recommendations were provided on reducing risk of chemicals impacting women health during the seminars.

Throughout its duration the project conducted a significant amount of capacity building. Based on this summary table the project involved 65 % females in their capacity building and awareness raising events and enhanced herewith women's empowerment.

However, there are no activities planned in the project design to address gender issues, and other developmental goals such as women's empowerment, income generation and improved governance although the development challenge of hazardous medical wastes management have gender-related dimensions.

Cost effectiveness.

A summary of total disbursements vs. the budgeted costs is provided in Table 9 below. The project is costeffective and procured best available services and goods by balancing the quality of submitted offers/proposals and financial offers. The project is also considered to be cost-effective because of the allocated budget seems too small for such type of projects with the suggested outcomes considering the size and differences between all 16 (sixteen) regions (oblasts) of the country.

Cost Item	2013	2014	2015	2016	2017	Total	% of allocat ed GEF amoun t
International consultants	0	64,603.00	39,121.00	31,297.42	22,352.80	157,374.22	4.6%
Local consultants	0	54,212.25	27,945.77	2,872.22	14,330.00	124,760.24	3.66%
Contractual services	0	79,543.55	182,504.96	1,101,876.57	669,450.00	2,033,375.08	59.8%
Travel	0	88,488.76	62,526.01	28,237.11	33,000.00	212,251.88	6.2%
Workshops	0	73,628.99	101,516.83	57,643.71	127,600	360,389.53	10.6%
Miscellaneous (including Administrative costs)	420.24	34,717.73	20,559.76	13,321.56	17,516	86,535.29	2.5%
Audio Visual & Print Production	0	21,202.02	15,125.08	10,002.39	19,500	65,829.49	1.9%
Contractual services - Individual	0	53,681.91	84,365.82	89,255.85	90,000	317,303.58	9.3%
Equipment and Furniture	0	7,531.18	0	0	0	7,531.18	0.2%

 Table 9. Actual disbursement of selected cost items vs. originally budgeted costs.

In terms of consultancy costs, the project has disbursed US\$157,374 for international consultants (or 4.6% of originally budgeted resources) and US\$124,760 for local consultants, (or 3.7% of originally budgeted resources) to implement component related activities.

The major part of the funds 59.8% were provided for Contractual services. Other important project costs include workshops (1.6%), individual contractual services (9.3%) and travel (6.2%). The Evaluator observed no discrepancies.

4.5 RATING OF THE RESULT INDICATORS

This Section is organized in a line with the 4 Components: for each one the extent of achievement of the planned targets and delivering outputs is described based on a quantitative and qualitive assessment of the planned end-of-project targets by end of September 2017⁴⁴.

<u>Component 1</u>: Stockholm Convention NIP update and improved institutional coordination on chemical MEAs:

<u>Outcome 1.1</u>: POPs inventories improved for informed decision making and priority setting.

<u>Indicator 1.1.1</u>: Capacity building programme (trainings) for involved stakeholders developed and implemented on POPs risks, inventories, POPs tracking, monitoring of data reported by responsible parties.

Training module on POPs risks and their sound management with testing section has been developed by the Centre for Sustainable Development. The module is used as part of conventional training for professional educational institutions and for staff of related state institutions and businesses. The project implements a complex approach to organized trainings and workshops to make the activities logistically more efficient. POPs training and workshops have been integrated into the general (1-3 days) training, that includes also mercury and HCW issues like summarized in the Capacity building table. Furthermore 10 workshops were conducted at which 538 persons participated.

Extent of achievement of planned targets:

- 1. The end-of-project target, namely "**Web tool for on line training completed and published**" has been met as Online training course is posted on http://zhasyldamu.kz/en/project-proon/programma-soz.html in March 2017. It is the website of Zhasyl Damu and the site is accessible for all relevant and involved stakeholders.
- 2. The end-of-project target, namely "At least three (3) complementary trainings completed" has been met. For the purposes of using and distributing materials prepared within the framework of the project, the "Center for Sustainable Development" Company conducted 9 additional trainings with the use of a training program prepared within the framework of the project and this has surpassed the target set for end of project.
- 3. The end-of-project target, namely "**Training effectiveness assessed (with both training feedback from the trainees and final tests**" has been met as all trainings were completed by filling in questionnaires, in which the trainees expressed their opinion. The main part of the participants noted the high efficiency of the training, the importance and relevance of the material presented.
- 4. The end-of-project target, namely "**Number of requests for data sent out and processed**" has been met. Training materials developed, printed and disseminated as well as training reports are developed and filed. The total number of requests sent to obtain the data was 405.
- 5. The end-of-project target, namely "**Number of visits made to related stakeholders**" has been met. The total number of visits to enterprises achieved 15 visits.

<u>Indicator 1.1.2:</u> National information system (inventory) on POPs expanded (updated information on uPOPs and new POPs).

⁴⁴ See Annex 12: Extend of Achievements of End-of-project Targets for Objective and Outcomes of the Project

"NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan" The POPs inventory has been completed, reported and distributed among stakeholders. Data on new POPs have been captured in the NIP update document which was submitted to the Stockholm Convention Secretariat. The inventory of PCB has been updated.

Extent of achievement of planned targets:

- 1. The end-of-project target, namely "**uPOPs inventory completed using the most recent data available**" has been met. Based on the results of the inventory with data received from enterprises, the volume of uPOPs emissions in Kazakhstan in 2015 amounted to 2,776g TEQ/year. The maximum emissions were received for the category "Heat and electricity production" (2,597.26g TEQ/year).
- 2. The end-of-project target, namely "POPs inventories updated for uPOPs and POPs pesticides, covering all the territory of Kazakhstan" has been partially met as The Project identified the discovery of new POPs pesticides in 7 (seven) out of 16 (sixteen) regions of Kazakhstan: Akmolinskaya, North Kazakhstan region, East Kazakhstan, Pavlodar, Kyzylorda, Almaty, Atyrau. The key challenge with meeting this target was related to huge territory of the country and budget of the project.
- 3. The end-of-project target, namely "Industrial use of new POPs identified and possible chemical and non-chemical alternatives assessed" is met. Most of the obsolete pesticides detected as a result of the inventory are mixtures of unknown composition (72% of the total number) that need identification. report posted on the website of JSC Zhasyl The is Damu: http://zhasyldamu.kz/images/UNDP1/19-06-17/SOZ-PES.pdf
- 4. The end-of-project target, namely "**Inventory of stockpiles and burial sites of pesticides covering at least 70% of the country**" is met. The types of industrial use of new POPs have been assessed from March 2016 to April 2017 and summarized, possible areas of application of specific new POPs have been identified at Kazakhstan enterprises, and alternatives to potentially used new POPs have been identified, both among chemicals and among non-chemical materials. The report is posted on the website of Zhasyl Damu JSC: <u>Http://zhasyldamu.kz/images/UNDP1/19-06-17/Ocenka%20SOZ.pdf</u>
- 5. The end-of-project target, namely "**Plan for maintaining and completing the above inventories** elaborated and institutional responsibilities assigned" is met. A Plan to continue the inventory of unintentionally formed persistent organic pollutants and new POPs pesticides, as well as other POPs included in the Stockholm Convention list, has been prepared in April 2017 and submitted to MoE. The methodology for inventory of POPs-pesticides, industrial POPs and uPOPs, the results of the inventory of these POPs, as well as proposals for the continued inventory of POPs in Kazakhstan were provided and published on <u>Http://zhasyldamu.kz/images/UNDP1/19-06-17/NO%20SOZ.pdf</u> in June 2017.
- 6. The end-of-project target, namely "An information system on inventories of POPs substances established" is met. A database of sources of new POPs and a database of sources of uPOPs have been prepared by the Project and provided to Zhasyl Damu. Reports on inventory of new POPs and uPOPs, have been prepared. All documents are available on the open information resource on www.zhasyldamu.kz.

<u>Outcome 1.2</u>: National capacities on POPs monitoring, analytical capabilities are assessed.

<u>Indicator 1.2.1</u>: Studies on existing POPs analytical and monitoring capabilities for the whole range of POPs (with focus on new POPs) carried out.

Extent of achievement of planned targets:

1. The end-of-project target, namely "**National POPs monitoring plan approved as part of relevant national policies and documents**" is met. Reports on laboratory assessment was developed. Proposals have been prepared for making additions to the monitoring development program. The proposals were submitted to the Ministry of Energy of the Republic of Kazakhstan for further

"NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan"

inclusion in the program documents. Ministry of Energy will consider the draft programme while approving its plans for national monitoring for RSE KAZHIDROMET.

2. The end-of-project target, namely "**Participation in regional monitoring networks**" is partialy met. The Project together with RSE KAZGIDROMET carried out work on preliminary monitoring of POPs in environmental objects in five regions of Kazakhstan. Currently, participation in regional monitoring networks is not possible due to the lack of accredited laboratories equipped for POP analysis. Currently RSE KAZGIDROMET extended the accreditation of laboratories in North and East Kazakstan Oblasts for conducting analyses for POP contended pesticides.

<u>Indicator 1.2.2</u>: A set of recommendations for the improvement of such capabilities formulated and submitted to the Government.

1. The end-of-project target, namely "At least two (2) laboratories accredited to perform uPOPs analysis in goods/environment" is partialy met. Two laboratories for accreditation were identified in the East-Kazakhstan and North-Kazakhstan branches of the RSE "Kazhydromet". Recommendations for accreditation of laboratories have been prepared. Due to the fact that at present the expansion of the field of laboratory accreditation for dioxins and furans is not possible due to the lack of expensive highly sensitive equipment, the laboratory of East Kazakhstan has carried out activities to prepare the accreditation of the laboratory for other POPs-POPs pesticides (Alfa-HCCH , 4,4-DDE, 4,4-DDD, 4,4-DDT), the analysis of which is possible on the available equipment. Jointly with branch of Samruk Kazyna the United Chemical Company LLP, negotiations are underway to establish a Center for Chemical Safety on the basis of Nazarbayev University, which includes funding for the identification of the entire spectrum of POPs and uPOPs. On request of LLP

"United Chemical Company", a technical specification for the laboratory equipment of this Center was developed by Project. By September 2017, it is expected that LLP "United Chemical Company", would purchase laboratory equipment with subsequent accreditation.

<u>Outcome 1.3:</u> Policy, institutional frameworks and enabling regulatory environment are in place to ensure better control on POPs accumulation and emissions.

<u>Indicator 1.3.1</u>. Institutional coordination and compliance with international agreements improved through firmer institutionalization of POPs issues into national structures.

Extent of achievement of planned targets:

1. The end-of-project target, namely 'POPs group meets regularly to guide the NIP update process' is met. To manage the process of updating the NIP, meetings with government bodies were held on a regular basis. It was conducted 7 meetings on high level.

2. The end-of-project target, namely **'Institutionalization of new POPs issues into relevant line ministries ensured according to defined roles'** is met. The analysis was carried out of existing mechanisms of inter-sectoral coordination of POPs management issues and legislation in the field of POPs management and wastes containing them, which resulted in proposals on improving the regulatory framework and mechanism for cross-sectoral coordination of POPs management issues. For each ministry and agency that is a participant in the coordination mechanism on POPs, terms of references were developed. The report with analysis was presented MoE in July 2017.

3. The end-of-project target, namely 'Coordination mechanisms on POPs issues institutionalized and embedded into draft regulations sent for Government's review and approval'. Proposals on the creation of a coordination mechanism on persistent organic pollutants in the Republic of Kazakhstan have been prepared, including terms of references for the authorized bodies of the Republic of Kazakhstan and proposals for financing, sent to the Ministry of Energy of the Republic of Kazakhstan

4. The end-of-project target, namely 'Funding sources to ensure the mechanism's sustainability are defined, consulted on with MoF, and proposed for inclusion in national planning' is partialy met. Work is underway to establish the National Coordinating Center of the Republic of Kazakhstan on Persistent Organic Pollutants (hereinafter referred to as the POPs NCC), based on JSC Zhasyl Damu. Draft requirements and estimation of expenses for the National Coordination center creation was presented to Zhasyl Damu. Project took part in the draft preparation. Currently the draft proposal on the establishment of the POPs NCC at the stage of consideration and approval.. Creation of NCC was conciliated with governmental bodies in September 2016. Financing of the national coordination mechanism should be developed and approved in accordance with the Budget Code of the Republic of Kazakhstan according to the existed rules and regulations for the development and approval of national budget programs

<u>Indicator 1.3.2</u>: National legal framework, by aligning institutional roles, reviewed and improved to include the issue of insofar unaddressed POPs, uPOPs and new POPs.

Extent of achievement of planned targets:

- 1. The end-of-project target, namely ' Final report on the improvement of current regulatory system for including the issues of insofar unaddressed POPs, uPOPs and new POPs" is met partialy. Project provided report with proposals on improvement current regulatory system. The order of the Minister of Energy on the "Rules for handling persistent organic pollutants" will be amended based on the report. Apart from updating the sections, the new two sections on the inventory of unintentionally formed POPs has been introduced. It is included step-by-step instructions and reporting form for enterprises to conduct a uPOP inventory.
- 2. The end-of-project target, namely 'Amended regulation drafted and submitted" is met partialy. Now, the Rules are going through the procedure established by the legislation for coordination with stakeholders. After the completion of this procedure, the Rules for handling POPs and the waste containing them will take effect.

<u>Indicator 1.3.3</u>: Sectoral technical guidelines updated to include the issue of priority POPs, including sampling and analysis methods

Extent of achievement of planned targets:

- 1. The end-of-project target, namely "Technical guidelines and action plans on POPs are submitted for approval by relevant state bodies" is met . The technical documents are developed and approved by the Order of the Committee for Technical Regulation and Metrology of the Ministry of Investment and Development of the Republic of Kazakhstan dated 26.11.2016 No. 270.Methods for determination of PCBD/F in environment objects (soil, water, air) are approved in the form of following National Standards of the Republic of Kazakhstan:
 - ST RK 2813- 2016 "Drinking, surface natural and sewage water. Determination of mass concentrations of polychlorinated dibenzodioxins and dibenzofurans ",
 - ST RK 2814-2016" Atmospheric air. Determination of mass concentrations of polychlorinated dibenzodioxins and dibenzofurans ",
 - ST RK 2815-2016" Soils and solid industrial wastes. Determination of mass concentrations of polychlorinated dibenzodioxins and dibenzofurans ".

<u>Indicator 1.3.4</u>: Capacity building programme (trainings) and consultations for involved stakeholders developed and implemented on POPs related risks, POPs monitoring, institutional roles and responsibilities, POPs control legislation benchmarks and enforcement

Extent of achievement of planned targets:

1. The end-of-project target, namely "At least, two (2) complementary workshops held" is met as the Center for Sustainable Development conducted additional 9 workshops on the handling of POPs and this has surpassed the target set for end of project.

- 2. The end-of-project target, namely "Sixty (60) stakeholders participated in workshops" is met. As more than 150 stakeholders took part in these workshops this has surpassed the target set for end of project.
- 3. The end-of-project target, namely **"Results of stakeholder consultations"** is met. The result of consultations was the raising of awareness, as well as the possibility of taking decisions on POPs and other chemicals. New project Proposal on 2nd stage of Mercury Inventory (Minamata Convention) was approved bt GEF.
- 4. The end-of-project target, namely "**NIP update formulated**" is met. The NIP was updated with respect to new POPs, uPOPs, pesticides containing new POPs. In 30 December 2014, the updated NIP of the new POPs was agreed with all stakeholders and approved by Ministry of Energy and submitted to the Secretariat of Convention.

<u>Indicator 1.3.5:</u> National Implementation Plan (NIP) on Stockholm Convention obligations with inclusion of new POPs reviewed and updated, with elaboration of specific action plans on new POPs.

Extent of achievement of planned targets:

- 1. The end-of-project target, namely **"Final draft of the NIP completed and circulated for review within the main stakeholders:** is met. From 2015 to 2017 the project was working on uPOP and updated NIP was presented to Ministry of Energy and it is currently on the Government site for discussion and feedback by stakeholders. In accordance with the current legislation, the draft is posted on the portal of state services of the Ministry of Energy of the Republic of Kazakhstan on <u>https://legalacts.egov.kz/list?governmentId=940</u>
- 2. The end-of-project target, namely "Updated NIP submitted for approval to the Government, approved and submitted to the Secretariat" is met. In 30 December 2014, the updated NIP of the new POPs was agreed with all stakeholders and approved by Ministry of Energy and submitted to the Secretariat of Convention in April 2015. NIP with uPOPs under Government consideration. Due to the long process of the Government approval the updated NIP with uPOPs will be completed by September 2017. It is planned before the end of the project activity

<u>Outcome 1.4</u>: Improved institutional coordination on chemical MEAs

<u>Indicator 1.4.1</u>: Review and better alignment of ministerial functions on implementation of Conventions' obligations.

Extent of achievement of planned targets:

- 1. The end-of-project target, namely "**Roadmap in place for joint coordination of M**EAs" is met. The Action Roadmap for the implementation of the Stockholm, Rotterdam and Basel Conventions was prepared and submitted to the Ministry of Energy of the Republic of Kazakhstan in July 2017
- 2. The end-of-project target, namely "**Draft regulation to enforce selected recommendations is in place**" is met. The Law of the Republic of Kazakhstan dated 28.04.2016 No. 506-V LRK "On Amendments and Additions to Some Legislative Acts on the Issues of Green Economy" amended the Environmental Code, establishing requirements on the need to destroy POPs in an environmentally sound manner. In addition, the norm of the maintenance of dioxins and furans in waste gases in concentration not higher than 0.1 ng/m 3 is established. The project team was part of the working group on introducing changes.

<u>Indicator 1.4.2:</u> Establishment of coordination mechanisms to support synergistic implementation of Stockholm, Rotterdam and Basel Conventions and established framework (system) for monitoring, accountancy and reporting on the implementation of the Stockholm, Basel and Rotterdam conventions in Kazakhstan.

Extent of achievement of planned targets:

1. The end-of-project target, namely "Draft legislation supporting establishment of the coordinating mechanism submitted for review and approval" is met. Together with JSC

Zhasyl Damu, work is underway to establish the National Coordination Center of the Republic of Kazakhstan on persistent organic pollutants (hereinafter - POPs NCC). The Draft Resolution of the Government of the Republic of Kazakhstan on the establishment of the POPs NCC is under the approval stage.

- 2. The end-of-project target, namely "**Temporary (with GEF/UNDP project's help) and fixed (Government) budgets for operation of the MEA mechanism defined and proposal for financing submitted to MoF**" is met. Financing of the coordination mechanism can be carried out at the expense of the republican budget programs. Budget programs for financing the coordination mechanism are developed and approved in accordance with the Budget Code of the Republic of Kazakhstan and the Rules for the development and approval (reaffirmation) of budget programs (subprograms) and the requirements for their content approved by the Order of the Minister of National Economy of the Republic of Kazakhstan of December 30, 2014, No.195.
- 3. The end-of-project target, namely "Monitoring system forms part of the prepared draft legislation on the MEA coordinating mechanism" is met. The issues of monitoring the implementation of MEA obligations are included in the proposals on the institutional structure of state bodies and organizations responsible for the implementation of the three conventions prepared by the draft and submitted to the Ministry of Energy of the Republic of Kazakhstan in July 2017.
- 4. The end-of-project target, namely "**Draft strategic concept and action plan are in place**" is met. The Action Roadmap for the implementation of the Stockholm, Rotterdam and Basel Conventions was prepared and submitted to the Ministry of Energy of the Republic of Kazakhstan in July 2017. The regulations on the National Coordination Center have been developed.

<u>Indicator 1.4.3:</u> Capacity of government authorities on implementation of chemical conventions improved. Improved data collection and chemical review processes for decision making and control improvements on the import and use of new dangerous chemical substances.

Extent of achievement of planned targets:

- 1. The end-of-project target, namely "**Draft legislation supporting establishment of the coordinating mechanism submitted for review and approval**" is met. The draft resolution on the establishment of the Coordination center (focal point) was agreed with all stakeholders and submitted to the Government for a final decision.
- 2. The end-of-project target, namely "**Received capacity is applied in decision-making forums**" is met. During the project implementation period, 5 workshops were held, focusing on the synergies of MEAs on chemicals. The project assisted in creating the institutional structure of state bodies and organizations responsible for the implementation of the three conventions through the preparation of proposals for its creation and submission to the Ministry of Energy of the Republic of Kazakhstan in July 2017. Long-term plans for the provision of national reports and proposals for changing statistical and industrial reporting systems, as well as requirements for model national reports, were prepared and submitted to the Ministry of Energy of the Republic of Kazakhstan in July 2017. Proposals on the organization of the information and education system of the population and cooperation with NGOs on the implementation of the three conventions were prepared and submitted to the Ministry of Energy of the Republic of Kazakhstan in July 2017.

Rating for Component 1: The rating for this Outcome is S (Satisfactory).

The outcome achieved most of its end-of-project targets, with only minor shortcomings. Overall POPs regular inventory mechanism is not yet completely developed due to insufficient laboratory capacity, standards for reporting, and deficient sampling data. But interviewed organizations and the Government expressed clear intentions to include POPs into national monitoring system of hazardous chemicals. This will naturally take longer than a project lifetime, due to reasons that are beyond the project's mandate and

capacity. It is anticipated that Zhasyl Damu Information Center will serve as a central data base for statistics, technical reports, and EIA related documents.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
	S				

<u>Component 2</u>: Overall mercury situation assessed and initial mercury reduction and containment plan formulated.

<u>Outcome 2.1</u>: Mercury assessment implemented, national consultations held to identify priorities for actions and capacity building on mercury risks carried out.

<u>Indicator 2.1.1:</u> Capacity building programme (trainings) for involved stakeholders developed and implemented on mercury risks, inventories, sources, data tracking.

Extent of achievement of planned targets:

1. <u>The end-of-project target, namely "Capacity building program (trainings) for involved</u> <u>stakeholders completed</u>" is met. An on-line course on the handling of mercury is posted on the website of Zhasyl Damu JSC, on the Project page (http://www.zhasyldamu.kz/ru/proektproon/programa-po-problemam-rtuti.html) in March 2017.

Indicator 2.1.2: Mercury situation in Kazakhstan assessed in coordinated manner jointly with UNEP

- 1. The end-of-project target, namely "Assessment of country's mercury sources, releases, contaminated sites and priority areas for mercury control completed" is met. Inventory of mercury in the Republic of Kazakhstan is conducted (1 level according to the UNEP methodology).
- The end-of-project target, namely "The country's baseline data is established" is met. The country base line was identified in the report "National inventory of mercury emissions in Kazakhstan" It was sent to the Ministry of Energy of the Republic of Kazakhstan in June 2016.
- 3. The end-of-project target, namely "**Information made available through database and open** access web-site" is met. The inventory was conducted for 2014. The baseline (2014) of mercury releases to the environment in the RK was 577 tons. This figure will be adjusted during the detailed inventory (2 level according to the UNEP methodology) of the new UNDP-GEF Project "Minamata Initial Assessment for Kazakhstan". Report is posted for open public access on the website of the Ministry of Energy of the Republic of Kazakhstan <u>http://energo.gov.kz/index.php?id=7536</u> and on the project page posted on the website of JSC "Zhasyl Damu" <u>http://www.zhasyldamu.kz/ru/proektproon/novosti.html?start=12</u>

Indicator 2.1.3: Outline of National mercury reduction plan developed

- 1. The end-of-project target, namely "**Extent of achievement of planned targets**" is met. Seminars have been held with stakeholders on mercury and its inventory. During the project implementation period, the issues of handling mercury, mercury, the provisions of the Minamata Convention and the results of the inventory of mercury in Kazakhstan were discussed and discussed at 35 seminars and trainings.
- 2. The end-of-project target, namely "**Required data collected and analysed, and discussed in stakeholder forums**" is met. The national capacity for handling collected mercury has been assessed; recommendations made for improvement. The corresponding Report has been sent to the Ministry of Energy for application in work.

- 3. The end-of-project target, namely "**Priorities identified and agreed with stakeholders**" is met. The Minamata Mercury Convention is included in the Perspective Plan for Concluding International Agreements of the Republic of Kazakhstan for 2017-2019. It is coordinated with 7 interested state bodies. There are remarks by the Ministry of Justice of the Republic of Kazakhstan, which will be developed in the framework of the UNDP-GEF project "Minamata Initia lAssessment for Kazakhstan".
- 4. The end-of-project target, namely "**Draft National Mercury Reduction plan is formally reviewed and cleared by relevant line Ministries and submitted for final approval**" is met. The draft National Plan for Reducing the Use and Collection of Mercury was developed and sent to the Ministry of Energy of the Republic of Kazakhstan in February 2017. According to the Letter of the MoE from 03.04.2017 No. 20-05 / 4086 the activities of the Plan will be integrated into the program and strategic documents of the interested state bodies after ratification of Minamata Convention by Republic of Kazakhstan (<u>http://www.zhasyldamu.kz/ru/proekt-proon/novosti.html?limitstart=0</u>)

Indicator 2.1.4: Public awareness raising campaigns on mercury risks conducted

Extent of achievement of planned targets:

The end-of-project target, namely "**Remaining 50% of activities designed in the awareness campaign accomplished**" is met. Workshops held on capacity building in mercury hazard for the environment and public health (9 during the reporting period, awareness of 310 people increased, since the beginning of the project, the capacity of about 1500 people has been increased). In polyclinic organizations of the pilot territories (60 polyclinics) posters about the dangers of mercury and mercury-free alternatives are placed. Brochures on the dangers of mercury have been published and distributed A campaign was held to raise public awareness about the possible negative consequences of using mercury clinical thermometers and ways of solving them, and to minimize their use in 14 pre-school and school education organizations in Astana by replacing them with alternative ones (electronic thermometers).

<u>Rating for Component 2</u>: Component 2 is rated as S (Satisfactory) as all the end-of-project targets are met. The work on total mercury assessment, that has been carried out in accordance with the methodology, prepared by UNEP, aimed at achieving the goal of adopting a decision on signing the Minamata Convention by the country. An agreement to refuse the use of mercury thermometers in the healthcare system has been signed with the health authorities in the pilot regions. Nevertheless, there is no proper disposal system for mercury waste available. The draft National Plan for Reducing the Use and Collection of Mercury was developed and submitted to the Ministry of Energy for final approval. New follow up UNDP supported and GEF financed project "Minamata Initial Assessment for Kazakhstan" was developed and signed in July 2017.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
	S				

<u>Component 3:</u> Minimization of unintentional POPs and mercury releases in selected hospitals through demonstration of sound Health-care Waste Management approaches.

<u>Outcome 3.1:</u> Sound health-care waste management through uPOPs and mercury reduction approaches are demonstrated in 2-3 regions of the country.

Indicator 3.1.1: Review of national policies and update of HCWM regulatory framework and road map.

Extent of achievement of planned targets:

1. The end-of-project target, namely "Legislative improvements (through amendments in the EcoCode) are submitted for final approval by the Government" is met. The Environmental Code

of the RK does not regulate the management of medical waste. Corresponding changes have been made to the sectoral normative legal acts. Amendments introduced to the sanitary-epidemiological rules approved by the order of the acting Minister of National Economy of the RK of May 24, 2015, No 127, in the part of the use of non-incineration methods for disinfecting medical waste.

- 2. The end-of-project target, namely "Technical standard for hazardous healthcare waste treatment, including non-combustion methods, is established in close consultations and forms a part of legislative improvements" is met.
- 3. The end-of-project target, namely "**Public procurement rules are amended and EPP criteria are set**" is met. By the Law of the Republic of Kazakhstan as of 04.12.2015, No. 344-V, the Law "On Public Procurement" p.4.st.37, which amended the requirements for the tightening of the competition for the provision of services, including when handling medical waste. Three trainings were conducted, including for healthcare workers in all regions of the Republic of Kazakhstan (16 regions in total) involved in organizing public procurement.
- 4. The end-of-project target, namely "Awareness raising workshops and media reports (at least, 3 complementary workshops for medical and private sectors, and 10 media reports)" is met. The end-of-project target, namely "National reporting to POPs convention improved" is met. The requirements for reporting the treatment of medical waste in the framework of the State Cadastre of Hazardous Waste are included in the draft edition of the new sanitary regulations "Sanitary and epidemiological requirements for health facilities". The rules will be approved in December 2017.

Indicator 3.1.2: Development of Regional HCWM Management Plan in selected provinces.

Extent of achievement of planned targets:

The end-of-project target, namely "The Management Plan is adopted, and further actions and investments scheduled" is met.

The end-of-project target, namely **"Roadmap to support its implementation is approved by participating stakeholder"s** is met.

Regional Health Management Plans in the all three pilot regions are adopted. The provisions of the draft Regional Health Management Plans are included in the following program documents of the pilot territories: - in Astana: in the draft "Regional program on waste management until 2020", which includes a separate section on the management of medical waste in the capital city. This document includes an analysis of the current situation on the management of all types of waste, the development of optimal mechanisms for safe collection and transport of waste, and the introduction of advanced technologies for waste management;

- in Kostanay Oblast: in the Development Program of the Kostanai Region Territory for 2016-2020 includes an analysis of the situation on the management of medical waste in the region, target indicators have been defined;

- in East Kazakhstan Oblast: Deputy Akim of the Oblast approved a regional plan of measures for the safe handling of medical waste in the EKO, including a brief analysis of the situation on the management of medical waste and measures for safe handling.

<u>Indicator 3.1.3</u>: Pilot HCWM projects in selected hospitals, including phase-out of mercury containing thermometers.

Extent of achievement of planned targets:

1. The end-of-project target, namely **"BAT/BEP (uPOPs and mercury reduction) policies are implemented and targets recorded"** is met. Within the scope of the Project activity, the Law of the Republic of Kazakhstan of 25.04.2016 No. 505-V ZRK "On Amendments and Additions to Certain Legislative Acts of the Republic of Kazakhstan on Ecology and Subsoil Use" in paragraph 2 of Article 79 of the Environmental Code of the Republic of Kazakhstan introduced amendments to the admissibility of the use of BAT, Included in the directories of the European Bureau for Integrated Control and Prevention of Environmental Pollution

- 2. The end-of-project target, namely **"Mercury thermometers are replaced by electronic devices, with resulting mercury waste safely handled"** is met. Within the framework of the Project, 18,000 clinical mercury thermometers have been electronically and safely disposed of in all health organizations of the pilot territories, which prevented the possible release of 36 kg of mercury into the environment. The collected mercury thermometers are aimed at demercurization to a specialized enterprise (Almaty).
- 3. The end-of-project target, namely "Health facilities dispose IHCW in non-combustion installation" is met. The commissioning and opening of the Centers for the Management of Medical Waste took place in March 2017. Currently, the Centers are not being loaded at full capacity, due to the process of participating in competitions and concluding contracts. Before the completion of the project, the Centers will begin to operate at full capacity. The volume of treated waste will be 1, 200 tons per year.
- 4. The end-of-project target, namely "Evaluation and documentation of practical results (inclusive of waste amounts minimized, uPOPs/mercury releases reduced) in conjunction with Outcome 4" is met. According to the reports of the Medical Waste Disposal Centers, the volume of treated waste will be at least 1,200 tons / year. According to the de-mercuration certificates for 18,000 mercury thermometers, the amount of mercury released into the environment is reduced by 36 kg.

Indicator 3.1.4: Establishment of HCW treatment centres in selected sites

Extent of achievement of planned targets:

- 1. The end-of-project target, namely **"HCW treatment centres successfully operate at preliminary planned capacity (950 tpa)"** is met. Seven (7) Centers for disinfecting medical waste with the use of non-combustion technologies, including 3, which were instaled in the places of previously operating combustion technologies. The autoclave's power is about 90 kg / h (with an average waste density of 120 kg / m3) (autoclave with a 750 l chamber) and about 30 kg / h (autoclave with a 250 l chamber). With an 8-hour working day, the total capacity will be: (6 autoclaves * 90kg * 8 hours * 270 days per year) + (3 * 30 * 8 * 270) = 1,360,000 kg / year or 1,360 tons / year.
 - a. About 13,5 thousand beds were covered. The work of these centers will allow to neutralize and reuse about 1.2 tons of infected medical waste.
- 2. The end-of-project target, namely "**Pricing policies implemented at target groups of stakeholders and service providers**" is met. The project prepared recommendations on pricing issues and conducted relevant trainings with interested parties.
- 3. The end-of-project target, namely "Applicable recommendations on possible pricing criteria proposed for legislative amendments" is met. The recommendations were presented in March 2017.
- 4. The end-of-project target, namely **"Waste reduction amounts and uPOPs reductions are measured and reported"** is met. The commissioning and opening of the Centers for the Management of Medical Waste took place in March 2017. Currently, the Centers are not being loaded at full capacity, due to the process of participating in competitions and concluding contracts. Before the completion of the project, the Centers will begin to operate at full capacity. The volume of treated waste will be 1, 200 tons per year. The volume of uPOPs in emissions will be decreased to 16.7 g TEQ/a, in bottom ash g TEQ/a

<u>Outcome 3.2</u>: Linkages between sound HCWM practices and minimization of uPOPs and mercury demonstrated through training and awareness raising programmes.

<u>Indicator 3.2.1</u>: Development and dissemination of BAT/BEP technical guidelines and general awareness raising

Extent of achievement of planned targets:

1. The end-of-project target, namely **"Technical guidelines approved and printed (legislative support to back guidelines proposed"** is met. The Environmental Code of the RK was amended

based on the Law of the Republic of Kazakhstan dated 25.04.2016 No. 505-V "On Amendments and Additions to Certain Legislative Acts of the Republic of Kazakhstan on Ecology and Subsoil Use" and now contains additions regarding the admissibility of the application of the best available technologies from the directories of the European Bureau for Integrated Control and Prevention Pollution of the environment. This will make it possible at the legislative level to use the available and recommended BAT/BEP in the field of medical waste management.

- 2. The end-of-project target, namely "**Hospitals receive materials for application in daily work**" is met. The project prepared standard drafts of standard operating procedures in the field of medical waste management and sent it to the Ministry of Health of the RK for use in August 2017.
- 3. The end-of-project target, namely "**Project team participates in scientific medical conferences** (at least, 2), public campaigns (media reports, at least 5, interviews, at least 3), Zhasyl Damu programme discussions and rountables" is met. In order to raise awareness about the project's activities and to interact with other countries on the management of chemicals and hazardous wastes, project representatives participated in the Final Conference on the UNEP-GEF Project "Pilot Project on the Cadastre of Mercury Pollution of the Environment in the Russian Federation" Moscow.

- took part in the scientific and practical conference "Technologies of Urban Sustainability", conducted within the framework of the "Sustainable Cities of Low-Carbon Development" Project. The topic "Management of urban wastes as a contribution to sustainable urban development" is highlighted, providing for a policy of separate collection and recycling of waste.

For the purpose of discussing the monitoring of persistent organic pollutants in the environment and increasing the capacity of the laboratories of regional branches of the RSE "Kazhydromet", a round table was held at RSE "Kazhydromet".

In order to enhance interaction between UNDP, WHO, UNEP the Project conducted a workshop in Astana, named "Mercury. Minamata Convention on Mercury "on the impact of mercury on the environment and public health".

For the purpose of interaction between state authorities, industrial enterprises and NGOs on the inventory of mercury in the Republic of Kazakhstan and the exchange of experience with the Russian Federation on this issue, a training workshop on "Legislative and institutional framework for the management of persistent organic pollutants and mercury. Inventory of persistent organic pollutants and mercury" was held in Astana.

4. The end-of-project target, namely "**National curricula updated**" is met. For the purpose of improving the educational process in terms of handling medical waste, the program of the training module developed by the project is presented to medical schools. In April 2017 the responses were received on the inclusion of this Program in the curricula of medical schools.

<u>Indicator 3.2.2</u>: Development of national training programs on uPOPs/mercury risks and sound HCWM, partnership with stakeholders and national replication of BAT/BEP demonstration.

Extent of achievement of planned targets:

- 1. The end-of-project target, namely "**Training carried in two demonstration regions for major health facilities, regional administration, and waste management service providers**" is met. For the purpose of raising awareness on the issues of handling medical waste, organizing and conducting public procurement for medical waste management services, training sessions were held in three pilot regions with the participation of representatives of medical institutions of all district hospitals (the total number of participants was 150).
- 2. The end-of-project target, namely "**Training carried in 12 regions for major health facilities, and regional administration and integrated into national training system**" is met. For the purposes of dissemination of information on the project activities, as well as on the work of the established pilot centers for the management of medical waste, training workshops were held for representatives of local government bodies from all non-pilot regions (13 /regionsoblasts) on the management of POPs, medical waste and state Procurement.

- 3. The end-of-project target, namely "**Training program adopted and replicated by health institutions**" is met. Training materials are used by medical organizations when training employees of an organization. In August 2017, the Department of Public Health Protection in East Kazakhstan and in September 2017 in the Health Department of the Kostanay region conducted seminars for representatives of medical institutions of the region on waste management (including the use of destructors and segregation of waste treatment facility).
- 4. The end-of-project target, namely "Media follows the initiative" is met. Information on media coverage is provided below.

<u>Rating for Component 3</u>: Component 3 is rated as S (Satisfactory) as the end-of-project targets are met and in some cases were not only met but surpassed. There was a large variety of the activities related to public awareness raising and training on the management of POPs, Medical Waste and State Procurement for different audinces including scientiests, NGOs and professionals. 18,000 mercury contained thermometers have been replaced for electronic ones in healthcare facilities of the pilot regions, aimed at reducing emissions of mercury. Although the reduction of POPs by the usage of non-burn technology during MTE in 2016 was assessed as behind the schedule the Project Team was able to make an effort and complete the work of instalation of non-burn technology equipments and comissioning it by July 2017.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
	S				

<u>Component 4</u>: Monitoring, learning, adaptive feedback, outreach, and evaluation.

<u>Indicator 4.1</u>: M&E and adaptive management applied to project in response to needs, mid-term evaluation findings with lessons learned extracted.

The project actual start date was delayed from September 2013 to April 2014, when the project staff was hired. The main reason for the delay was time-consuming procedures for endorsement and signing of the Project Document by the National Executing Agency. The project prepared Annual Work Plans based on the Project Document strategy description, log frame targets and indicators.

Although during the Inception Workshop no major changes were reported, the project transferred the significant part of the pilot activities from the second (as planned in the ProDoc) to the third year of the project implementation due to need for extra time for additional data collection, selection of the pilot sites, and coordination of the preliminary agreements between the participants of the pilot activities together with associated budget for equipment. This change was not formally approved by the Steering Committee during the 2015 planning process.

Extent of achievement of planned targets:

The End-of-project target, namely "**Final evaluation report ready in the end of project**" is met as terminal evaluation was started before the Project end and were conducted from June to August and final TE report was provided in August 2017.

Rating for Component 4: The end-of-the-project targets are met and rated as S (Satisfactory)⁴⁵. In general, the project activities are carried out in accordance with the approved work plans, project documents, procedures and UNDP standards. Risks are introduced in the Atlas system but need to be reviewed and updated more frequently and on the regular basis. Quarterly and annual reports are submitted in a timely manner. Financial management is conducted strictly with the ProDoc and in accordance with the procedures and standards of UNDP. Disbursement of the grant by the end of project will be almost 100% - further review and acceleration of activities need to be conducted within the remained period after TE completion from

⁴⁵ The objective/outcome is expected to achieve most of its end-of-project targets, with only minor shortcomings.
Terminal Evaluation of UNDP-supported GEF-financed Project

"NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan" August to the end of September 2017. In order to assess the pilot projects' operation there is a need to establish post-project monitoring and evaluation procedures in agreement with UNDP CO and beneficiaries.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
	S				

Project implementation and adaptive management.

Project implementation and adaptive management of The Project is rated as S (Satisfactory) on the basis that Implementing and Executing agencies have worked well together, serviced by a very competent PIU that has established effective working relations with key partners and more widely at 3 Oblasts and selected small cities' levels. The Project team has been persistent in working with the Government, hospitals, private sector and NGOs that resulted in a high percentage of disbursed the GEF grant as well as planned co-financing by the end in the Project implementation, despite the challenges. Although the Evaluator has observed the need for improvement of M&E and English language skills of the Project Manager.

In the following the implementation and adoptive management of the project is evaluated. The reviewed objectives "management, work planning, financing and project monitoring and evaluation" are analysed and rated.

Table 10. Rating summary of project implementation and adoptive management review

Review Objectives	Ratings for Project Implementation & Adaptive
	Management
Management Arrangements	Moderately Satisfactory
Work planning	Satisfactory
Finance and co-finance	Satisfactory
Project-level monitoring and evaluation systems	Moderately Satisfactory
Reporting	Satisfactory
Communications	Satisfactory

A summary of the rating results is applied in the Table 10 and summarized in table below:

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
	S				

Rating for Sustainability Criteria.

Four (4) factors of sustainability (Institutional Framework and Governance; Financial; Environmental and Socio-Political Sustainability) are analyzed as well as rated⁴⁶.

Sustainability factors seem"moderately likely" to be in place before the project will be completed and requiring a need for more focus on a strategy on reducing risks of project dependence on UNDP GEF technical support. This work can be continued within the time of implementation of the new UNDP suported and GEF finnaced project "Minamata Initial Assessment for Kazakhstan", which was signed in July 2017.

More details on the rating system of different factors of the Sustainability Criteria are the following:

Institutional framework and Governance risks and sustainability.

The sustainability of the project activities and results of this factor is "moderately likely" to be achieved before the project will be completed. The regulative framework has been strengthened by the activities of

⁴⁶ The ratings used for sustainability aspects of the project are the following: Highly Likely (HL); Likely (L); Moderately Likely (ML) Moderately Unlikely (MU); Unlikely (U); Highly Unlikely (HU).

the project: NIP update on new POPs, approved amendments to Eco Code, which provide good ground for further improvements of regulations and standards on HCW and mercury containing waste.

There is a need for harmonization of HCW classification used by Ministry of Healthcare and Ministry of Energy to avoid statistical misreporting caused by complicated reporting procedures which sometimes causes illegal burning of waste in hospitals.

Capacities of authorities and laboratories have been enhanced and training materials have been developed, which will be used further on.

Financial risks and sustainability.

The main financial risks of sustainability ("moderately likely") are related to financial capacities of regional and local authorities (Akimats), also to lack of finance resources of healthcare government entities. This creates a risk for continuation pace of some activities currently supported within the GEF financing trend (for example, related to purchasing non-burn technologies and special transportation for collecting medical wastes). At the same time, the adoption of relevant amendments in the government procurement procedures and promoting PPP mechanisms in management of HCW create an opportunity to eliminate barriers that prevent from financing by Akimats of HCWM and as a result reduction of emissions of POPs. A clear exit strategy needs to be developed before the project will be completed so that the mechanisms and structures are discussed with key stakeholders and created during the project implementation to guarantee the end of funding sustainability⁴⁷.

Environmental risks and sustainability.

The environmental risk to sustainability regarding the activities of this Project can be considered as "moderately likely". Up to now the environmental risk has been lowered by raising awareness and phasing out of mercury containing thermometers. Nevertheless, until today the mercury containing waste is stored at the private treatment facility in Almaty - a final solution need to be identified.

The mercury phasing out activities of the project resulted in a reduction of 36 kg/year of potential Hg releases. To eliminate the use of mercury thermometers in healthcare facilities in the pilot regions and to ensure safe collection and treatment of mercury thermometers, MoUs have been signed with Ministry of Energy of RK and akimats (local executive bodies) of pilot regions, involving denial of further purchase and use of mercury thermometers. So, the project provided good start for compliance with its requirements.

Awareness and capacity on POPs, healthcare waste management and mercury management has been increased, aware of the environmental issues, and people have been involved in awareness and training activities. This all will benefit the environmentally sound management of POPs containing products, healthcare waste management and mercury waste management. Nevertheless, the work on assessing results of all pilots should be monitored and evaluated after one year at least as well as replication of non-burn technologies should be spread around the country. Regardless installation of new non-burn technologies there is observed fact that the old combustion technologies are still in operation in the pilot regions (example, in Kostanay Region, see Annex: Photolog, Picture 1 and 2).

Social-economic risks and sustainability.

To summarize, while the fact that the big share of project activities is at the policy and capacity building level is a supportive factor for the sustainability prospects, but there is a room for the substantial improvement of the environmental sustainability⁴⁸ of various activities started by the Project. The sustainability of the project activities and results of this aspect is "moderately likely" to be achieved.

Considering that this aspect does not appear to be a sensitive issue in the areas of POPs and mercury management, Socio-Political changes are unlikely to have a significant impact on this sector. Nevertheless, government changes appear to happen frequently in Kazakhstan, and can also results in changing national

⁴⁷ Mid-term Evaluation Report of UNDP-supported GEF-financed project "NIP update, integration of POPs into national planning and promoting sound healthcare waste management in Kazakhstan"

⁴⁸ http://tender.recycle.kz/plan.php

"NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan" priorities and legislation which indirectly might impact priorities and legislation governing PCB and POPs

issues.

Preparation of a project video was one of the recommendations of the MTE. The establishment of centralized treatment facilities using non-burn technology including the complete segregation, storage, transport, treatment and disposal system should be shown and market. It would embed confidence in project partners and healthcare waste managers and handlers, to visually showcase the entire healthcare waste logistic from segregation up to disposal. A project video would also allow for a good project keepsake that could easily be used share experiences with other countries. Due to the delay of installation and commissioning of non-burn technology equipment and transportation the work on production of such video has been started at the same time of beginning of TE in July 2017.

Likely (L)	Moderately Likely (ML)	Moderately Unlikely (MU)	Unlikely (U)
	ML		

4.6 **PROJECT IMPACT AND BENEFITS**

The Project updated the National Implementation Plan (NIP) for the commitments under Stockholm Convention in the part of new and unintentional persistent organic pollutants, increased the Kazakhstani Government's POPs monitoring capability, and improved institutional coordination of Intergovernmental Negotiation Committee (INC) on chemicals. The Project did directly affect the preparation of POP inventory through research and stakeholder outreach during the implementation period of the Project. Furthermore, the Project played a big role in advocacy through its work on regulations and standards, support for laboratories certification and accreditation, and promotion among public.

Assessment of mercury situation was conducted and recommendations on accession to Minamata Convention and draft preliminary Plan on Reduction of Mercury Use were submitted to the Government. The Plan describes the activities, aimed at taking measures to minimize emissions of uPOPs when decontaminating healthcare waste is in place.

The Project deserves credit for design and implementation of the pilot projects on installation non-burn technologies and introduction replacement mechanism of mercury-containing thermometers in 3 selected pilot territories in East-Kazakhstan, Kostanay regions and the city of Astana. It is aimed at creation and demonstration of the safe healthcare waste management system. Although impact of demonstration projects can be measured after one or more of years of installation after detailed monitoring of the demonstration project and evaluation their results. Nevertheless, there are few examples in 3 regions of Kazakhstan where some hospitals and private companies have allocated own financial resources from their budgets for installation non-burn technologies and started collection and utilization processes of hazardous healthcare wastes in North Kazakstan (Petropallovsk city, PROMOOTHOD Ltd., Autoclave 150l/h), in Astana (City Clinic, autolcave Baltner, 120 l/h) and in Kostanay (Urdzhar City, autoclave Baltner, 4 l/h; Kurchumskyi region, AMTD-150, 25 l/h).

4.7 OVERALL RATING OF PROJECT ACHIEVEMENTS

So, to summarize most of the **End-of-project targets** for the Indicators against and The Project impact (above section 4.5 Rating of The Result Indicators and section 4.6 Project Impact and Benefits) it can be concluded that the main Objective of the Project were met, with only minor shortcomings. Therefore, an overall rating for extent of attainment of planned Objective is S (Satisfactory).

Below table is summarizing all required ratings:

Table 2. Evaluation Ratings: UNDP-supported GEF-financed Full-Sized Project "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan"				
1. Monitoring and Evaluation ⁴⁹	rating	2. IA& EA Execution ⁵⁰	rating	
M&E design at entry	S	Quality of UNDP Implementation	S	
M&E Plan Implementation	S	Quality of Execution - Executing Agency	S	
Overall quality of M&E	MS	Overall quality of Implementation / Execution	S	
3. Assessment of Outcomes ⁵¹ ra		4. Sustainability ⁵²	rating	
Relevance ⁵³	R	Financial resources	ML	
Effectiveness	S	Socio-political	ML	
Efficiency	S	Institutional framework and governance	ML	
Overall Project Outcome Rating	S	Environmental	ML	
		Overall likelihood of sustainability	ML	

5 CONCLUSIONS AND RECOMMENDATIONS

Conclusions.

The following Conclusions have been identified:

 The UNDP-supported GEF-financed Full-Sized Project "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan (PIMS 4612) has been implemented efficiently and expected to be closed in due time scheduled for September 2017. UNDP made a great effort by assigning the office staff and financial resources to support the Project implementation from 2013-2017. The disbursement rate of the GEF resources as of 17 July 2017 is 92%. The Total Project budget and work plan includes US\$ 38,412,758, of which GEF resources accounts for 3,400,000 US\$(8.9%), 75,000 US\$ of UNDP TRAC and US\$ 34,837,758 cofinanced by city governments (Akimats) and healthcare entities and NGOs (90%). The main disbursements were done in procurement area, thus in Outcome 3 - the contractual services make up for 72.7%, in the Outcome 1 – the contractual services make up 13%, and expenses in the Outcome 2 – make up 6.4% and in the Outcome 4 – the M&E work make up 5.4%. All expenditures are committed. Based on the evidence available (mission reports, purchase orders, descriptions of training events) the Evaluator concludes that the outputs have been delivered as reported and 100%

⁴⁹ Using a six-point rating scale: 6: Highly Satisfactory (HS), 5: Satisfactory (S), 4: Marginally Satisfactory (MS), 3: Marginally Unsatisfactory (MU), 2: Unsatisfactory (U) and 1: Highly Unsatisfactory (HU)

⁵⁰ Using a six-point rating scale: 6: Highly Satisfactory (HS), 5: Satisfactory (S), 4: Marginally Satisfactory (MS), 3: Marginally Unsatisfactory (MU), 2: Unsatisfactory (U) and 1: Highly Unsatisfactory (HU)

⁵¹ Using a six-point rating scale: 6: Highly Satisfactory (HS), 5: Satisfactory (S), 4: Marginally Satisfactory (MS), 3: Marginally Unsatisfactory (MU), 2: Unsatisfactory (U) and 1: Highly Unsatisfactory (HU)

⁵² Using a four-point rating scale: Likely (L); Moderately Likely (ML); Moderately Unlikely (MU); Unlikely (U)

⁵³ Relevance rating scale: Relevant (R); Not Relevant (NR).

"NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan" disbursements of GEF grant and 98% of co-financing disbursements will be reached by September 2017. As a general appreciation, the procured goods and services are of good value. The Evaluator has observed that the procured installed non-burn technology equipment agrees with their purpose.

- 2. The Evaluator found the local counterparts and the UNDP Country Office highly committed to the Project. The Evaluator observed constructive working relations between the UNDP and the key national counterparts.
- 3. As for the implementing partner, it appears that excellent inter-relationships were established between the three parties, PMU, UNDP CO and MoE, as observed during this TE. Throughout this process, the essential functions of the national implementing partner continued without interruption. Notably, key committees and departments dealing with chemical management continued to respond essentially to the same chain of command. Following internal changes in the Government the same person Ms. Bizara Dosmakova served throughout the project lifespan since April 2014 until its end as National Project Director (NPD) on behalf of MEP, MEWP and MoE. Therefore, at the level of personnel as well as the agency itself, communication between project staff and the NPD also remained steady throughout the whole project period, within and outside business hours.
- 4. The Project has achieved all the anticipated outcomes contributing to uPOPs issues and mercury recycling as The Project's assistance to the country in fulfilling Kazakhstan's commitments under the Basel, Rotterdam and Stockholm Convention and in the end the Project deserves credits for these great results.
- 5. The Project did directly affect the preparation of POP inventory through research and stakeholder outreach during the implementation period of the Project. Furthermore, the Project played a big role in advocacy through its work on regulations and standards, support for laboratories certification and accreditation, and promotion among public. The Project deserves credit for design and implementation of the pilot projects on installation non-burn technologies and introduction replacement mechanism of mercury-containing thermometers in 3 areas of Kazakhstan. The certified laboratories should be properly equipped and completely functional with qualified technical staff to work on dioxides and furans. The Project assisting the KAZGIDROMET and United Chemical Company LLP to identify relevant specifications and find funding for the laboratory equipment and capacity building of the laboratory staff.
- 6. Through its workshops, conferences, dissemination of trainings the Project directly communicated to executive authorities on medical waste management choice solutions. More broadly, the Project's promotional efforts among public reached big number of relevant stakeholders with focused messaging on uPOPs issues, new non-burn technologies and mercury recycling that they would have difficulty to receive without organized effort by a knowledgeable team.
- 7. The ProDoc was signed on October 22, 2013 within three months since the receipt of official communication from the GEF Secretariat. Timing of the Inception Workshop has been delayed by six months due to process of hiring of relevant national project manager and project staff. The Project had some delays in implementation of its activities due to different internal and external factors affecting the speed and included: procurement delays and frequent government restructuring. In addition, the slow implementation of Outcome 3 was observed through unexpected changes of the

place for equipment installation in the pilot territories, which required additional work on determination the new installation places and conducting long negotiation processes with local governments and key partners as well as and formalizing new agreements.

- 8. Promoting successful pilot projects results through broad awareness campaigns is an important precondition for project sustainability and replication. The Project accompanied with a wide raising awareness campaign and implemented by the Project in 2013-2017. Completion of installation and commissioning of 10 non-burn equipment in eight (8) pilot project areas by end of the Project's lifespan limits possibility for proper monitoring of practical demonstration of the new non-burn technologies and therefore limits sharing results of the pilots.
- 9. By the end of the Project it became clear that low prices of old combustion technologies for healthcare medical waste management is a main risk for further promotion of good quality non-burn technologies in Kazakhstan as the State Procurement regulations were based on principles of cost minimization, fair competition, transparency, and support of domestic suppliers, but not include reduction of uPOPs or environmental cost.
- 10. The Project enabled reduction of uPOPs in Kazakhstan and generated useful learning experiences attracting interest of private investments for introduction of new technologies for medical waste management projects which can serve as input not only in Kazakhstan but also for future all UNDP-supported GEF-financed project in area uPOPs reduction. The possibility of sharing The Project experience on the regional level has a good framework since for years Kazakhstan has been providing official development and humanitarian assistance, helping various countries in the Central Asian region and beyond. To strengthen its role as an emerging donor, Kazakhstan wants to systematize and professionalize its efforts and align ODA with the priorities of its foreign policy. The MFA is partnering with UNDP in designing and elaborating its development cooperation. The cooperation project aims to support MFA RK to establish a national ODA agency. Through expert support the project provides the analysis of the best international experience and situation of the ODA new donors, shows common threats and problems and ways to solve them effectively.
- 11. In the project design, there is a lack of information broken down by gender—both quantitative data and qualitative information although the development challenge of hazardous medical wastes management have gender-related dimensions.

Recommendations:

The list below summarizes the main Recommendations for the UNDP Kazakhstan CO future programming:

- 1. UNDP CO should introduce post-project monitoring of operation and use of the Project's equipment in the all pilot areas within one-two years after the Project closer.
- 2. It is recommended considering joining forces with central and local Government agencies, private companies and business associations, UN agencies, international donors and NGOs for promotion of changes in the laws/regulations in the country to allow better promotion of business involvement

"NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan" for introduction of new non-burn technologies through Private Public Partnership (PPP) programmes/mechanisms.

- It is recommended to expedite work on supporting the existed National Association of Waste Management (KazWeste)⁵⁴ to insure sustainability in promotion of new Best Environmental Practice / Best Available Techniques (BEP/BAT) for medical waste reduction and recycling in Kazakhstan.
- 4. It is recommended to continue assistance to the Government in accelerating its work for determining the national requirements and needs for the ratification of the Minamata Convention and building national capacity, establishing structures and practices to undertake future work towards the implementation of the Minamata Convention in coordination with existed work on the Stockholm, Basel and Rotterdam Conventions under the new UNDP-supported GEF-financed project "Minamata Initial Assessment for Kazakhstan".
- 5. It is recommended that future project/s pay more attention to address gender dimensions aspects in the design of activities as well as engagement of women, recognizing their role as stakeholders regarding hazardous waste management aspects in the country. Professional training and public outreach should be designed with a special eye toward both gender equity and responsiveness to gender-specific issues. It is also important to note mandatory Annex on Gender Mainstreaming Analysis and Action Plan for future GEF projects.
- 6. UNDP CO could recommend the MFA RK to consider of the Project's results in the Kazakhstan ODA recipient countries in Afghanistan, Tajikistan and Kyrgyzstan and involvement of GEF RBEC/RBAP and UNDP COs in respective countries to ensure smooth and successful replication process to achieve global chemical security benefits.
- 7. It is recommended to consider the above recommendations while implementing the new UNDPsupported GEF-financed project "Minamata Initial Assessment for Kazakhstan", planned from 2017-2019. in Kazakhstan.

6 LESSONS LEARNED

The Evaluator has identified the following Lessons that can be drawn from the Project:

- 1. Establishing a close collaboration early-on with similar projects in other countries, with similar socio-economic conditions, is an effective and efficient way to learn from the experiences and challenges that others have faced while providing support and advice to projects that are at an earlier implementation phase. The Project worked closely with similar project in the Kyrgyz Republic.
- 2. Providing assistance on accreditation and advising on modern and highly sensitive equipment for the existed testing laboratories in the East-Kazakhstan and North-Kazakhstan branches of the RSE

⁵⁴ Association KazWeste unites more than 35 organization and enterprises working in waste management. The Association was created in 2013 and accredited by Ministry of Energy, Investments and Development. The KazWeste is a member of the Committee of Green Economy of the Association of Enterprises Atameken and an official member of International Solid Waste Association (ISWA).

"Kazhydromet" is a fundamental condition to create the necessary technical basis to ensure the required high-level control of dioxins and furans as well as other POPS and POPs-pesticides (Alfa-HCCH, 4,4-DDE, 4,4-DDD, 4,4-DDT), the analysis of which is possible with the available equipment. The Project provided recommendations for accreditation of laboratories. The Project also could support national laboratories through arranging transferring knowledge of testing procedures and improved required skills to create a viable network of certifying laboratories.

- 3. Keeping close monitoring over new emerging non-burn technologies may contribute to the project benefits. The Project has implemented the new non-burn technologies for the attention of public, business, healthcare entities, local health authorities etc. and proved the potential of replication of the new non-burn technology for improving HCWM and reduction of emotions of u-POPs.
- 4. Promoting successful pilot projects results through broad awareness campaigns is an important precondition for project sustainability and replication. In case of the Project, the installation of the pilot projects was significantly delayed. Therefore, the Project was not able to benefit from assessing and evaluation of project results.
- 5. Generating useful learning experiences which may serve as input for future UNDP and GEF programming not only in Kazakhstan but for whole Central Asian region. Therefore, the capacity of The Project staff of capturing lessons on regular basis and documenting the collected information from different formal and informal sources is very important for its improving through monitoring, available training and mentoring from UNDP CO side.
- 6. Finding of innovative and creative approaches through analyzing the legislative framework for possible co-financing by local partners can contribute to projects' financial sustainability. The implementation of pilot projects allowed to learn that local Akimats are receiving funding from the central government and they do not have flexibility to support financially replication of the pilot projects. In would be valuable to consider projects supported through establishing of joint ventures with private sector where Akimats had only part of ownership and can utilize current PPP mechanisms. Without promoting this type of cooperation, it will remain difficult for local authorities to get an access to funding from private sector.
- 7. Developing of mercury thermometers utilization system by The Project is a way to ensure environmental benefits of The Project. Regardless the good progress of mercury thermometers collection and replacement by electronic thermometers the Project could consider the impact of other mercury contained medical equipment, general appliances used in the medical organizations and as well as mercury lamps. As it was recognized through another UNDP supported and GEF financed Lighting Efficiency Project implementation the mercury lamps are still imported in a big amount. Within the period from 2012 to 2016 there were 53.8 million mercury lamps imported into the country. In addition, the Project should be aware that after certain time the replacement of the electronic thermometers will be an issue as an electronic waste.
- 8. Participating in regional events might be a potential to consider results and experience received during the Project implementation for development a project idea on biosafety in Kazakhstan or in the Central Asian Region. The project team took part in the regional conference "The Future of

Biosafety and Biosecurity in Central Asia, Afghanistan and further countries from the region – approaches, achievements and challenges, held in October in Bishkek.

- 9. Creating and regular updating rosters of potential national managers of GEF and non-GEF projects, evaluators and experts on different relevant subjects within all planned interventions of UNDP CO in Kazakhstan can drastically expedite implementation of UNDP projects.
- 10. Management training for national staff engaged in the UNDP projects' implementation should be mandatory and it need to be annually updated and reviewed by responsible units' staff with possible certification of the received skills and knowledge.

ANNEXES:

ANNEX 1: EVALUATION TERMS OF REFERENCE

TERMINAL EVALUATION TERMS OF REFERENCE

INTRODUCTION

In accordance with UNDP and GEF M&E policies and procedures, all full and medium-sized UNDP support GEF financed projects are required to undergo a terminal evaluation upon completion of implementation. These terms of reference (TOR) sets out the expectations for a Terminal Evaluation (TE) of the UNDP-supported GEF-financed project, "NIP update, integration of POPs into national planning and promoting sound healthcare waste management in Kazakhstan" (Kazakhstan) (PIMS # 4612)

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

PROJECT SUMMARY TABLE

Project	NIP update, integration of POPs into national planning and promoting sound healthcare waste					
Title:	manag	ement in Kazakhstan				
GEF Proje	ect ID:	#4442			<u>at endorsement</u>	<u>at completion</u>
		#4442			<u>(Million US\$)</u>	<u>(Million US\$)</u>
UNDP P	roject	00085149 (PIMS	GEF financing:			3,400,000
	ID:	#4612)		3,4	00,000	
		00071893 (Atlas ID)				
Со	untry:	Kazakhstan	IA/EA own:			
R	egion:	RBEC/CA	Government:	34,	315,820	34,315,820
			UNDP:	75,000		75,000
			UNDP (in-kind):	100,000		100,000
Focal	Area:	Persistent Organic	Other:			521,938
		Pollutants CHEM-1,		521	1,938	
		3, 4				
FA Objec	ctives,		Total co-financing:	25	012 759	35,012,758
(0	P/SP):			55,	012,758	
Exe	cuting		Total Project Cost:	20	112 759	38,412,758
Ag	gency:			50,	412,758	
Other Partners		Ministry of Energy of	ProDoc Signatu	ature (date project began):		22.10.2013
invo	olved:	RK	(Operational) Clos	ing	Proposed:	Actual:
			Da	te:	30.09.2017	30.09.2017

OBJECTIVE AND SCOPE

The project was designed to reduce the releases of unintentionally produced POPs and other globally harmful pollutants into the environment by promoting sound healthcare waste management in Kazakhstan, and to assist the country in implementing its relevant obligations under the Stockholm Convention

The goals will be achieved through implementation of 4 components:

- Stockholm Convention NIP update and improved institutional coordination on chemical MEAs;
- Overall mercury situation assessed and initial mercury reduction and containment plan formulated;

• Minimization of unintentional POPs and mercury releases in selected hospitals through demonstration of sound Healthcare Waste Management approaches

• Monitoring, learning, adaptive feedback, outreach, and evaluation.

The TE will be conducted according to the guidance, rules and procedures established by UNDP and GEF as reflected in the <u>UNDP Evaluation Guidance for GEF Financed Projects</u>.

The objectives of the evaluation are to assess the achievement of project results, and to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming.

EVALUATION APPROACH AND METHOD

An overall approach and method⁵⁵ for conducting project terminal evaluations of UNDP supported GEF financed projects has developed over time. The evaluator is expected to frame the evaluation effort using the criteria of **relevance, effectiveness, efficiency, sustainability, and impact,** as defined and explained in the <u>UNDP Guidance for</u> <u>Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects</u>. A set of questions covering each of these criteria have been drafted and are included with this TOR (*see <u>Annex C</u>*) The evaluator is expected to amend, complete and submit this matrix as part of an evaluation inception report, and shall include it as an annex to the final report.

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

- "Medox" LLP in Astana city;
- "Kostanay ecomedutilizatsiya 2016" LLP in Kostanay city;
- PSE on REM "Zhitikara Central Rayon Hospital" in Kostanay region;
- PSE on REM "Rudnyi Municipal Hospital" in Kostanay region;
- o PSE on REM "Center of Mother and Child" in Ust-Kamenogorsk city (East-Kazakhstan region);
- o PSE on REM "Central Rayon Hospital of Katon-Karagay Rayon" in East-Kazakhstan region;
- PSE on REM "Central Rayon Hospital of Zaisan Rayon" in East-Kazakhstan region.

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

#	Name	Title	Organization	
1	Ms. Nina Gor	Project Manager		
2	Ms. Assel Shakhanova	Expert on healthcare waste and mercury pollution		
		management		
3	Ms. Saltanat Bayeshova	Expert on capacity building in the field of persistent	UNDP/GEF project	
		organic pollutants and other harmful chemical		
		substances		
4	Ms. Zulfiya	Project Assistant		

Project

⁵⁵ For additional information on methods, see the <u>Handbook on Planning, Monitoring and Evaluating for Development</u> <u>Results</u>, Chapter 7, pg. 163

	Wir Opdate, integration of FOF3 into National Flamming and Fromoting Sound Healthcare waste Management in Kazakistan				
5	Ms. Madina Kassenova	Procurement Assistant			

UNDP

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#	Name	Title	Organization
1	Mr. Maksim Surkov	UNDP-GEF RTA	UNDP, Istanbul
2	Mr. Rassul Rakhimov	Head of SDU unit	
3	Ms. Victoria Baigazina	Programme Associate of SDU unit, project supervisor	UNDP CO
4	Ms. Zhanetta Babasheva	M&E focal point	

GEF Operational Focal Point

#	Name	Title	Organization
1	Mr. Gani Sadibekov	Vice Ministry	Ministry of Energy of the Republic
			of Kazakhstan

Ministry of Energy of RK – Main Partner

#	Name	Title	Organization
1	Ms. Bizara Dosmakova	Deputy Director of the Waste Management	Waste Management Department,
		Department, National Project Director	Ministry of Energy of RK

Project Partners

#	Name	Title	Organization
1	Zhan Nurbekov	Director of Waste Management Department	Ministry of Energy of RK
2	Zhanar Asanova	Head of the Ownerless Waste Management	JSC "Damu Zhasyl" under the
		Department	Ministry of Energy of the Republic
			of Kazakhstan
3	Zhuldyz Urazbekova	Head Expert of Sanitary and Hygienic	Committee for Public Health
		Surveillance Department	Protection under the Ministry of
			Public Healthcare of RK
4	Danara Alimbayeva	Director of the Environmental Monitoring	Kazhydromet
		Department	
-	Conset Kalinan	Denvite Hand	
5	Samat Kaliyev	Deputy Head	Department of Natural Resources
			and Environmental Governance of
			Kostanay region
6	Svetlana Arsentyeva	Head of Unit	Department of Natural Resources
			and Environmental Governance of
			Kostanay region
7	Vladimir Mikhailenko	Chief Doctor of "Kostanay Regional Narcological	
		Dispensary"	
8	Sergey Mukashev	Specialist of State Environmental Control Unit	Department of Ecology of Kostanay
			region
9	Tatyana Kozlyanskaya	Head of the Integrated Environmental	Branch of the RSE "Kazhydromet"
		Monitoring Laboratory	for East Kazakhstan region
1			

Terminal Evaluation of UNDP-supported GEF-financed Project "NIP Lindate Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan"

10	Sergey Popov	Head of the Center	Center of Mother and Child of East-
			Kazakhstan region
11	Kazken Orazalina	Expert on chemicals	NGO
12	Kavira Mukasheva	Senior teacher Department of Occupational Health, Communal Hygiene	JSC "Medical University of Astana"

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

EVALUATION CRITERIA & RATINGS

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

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

PROJECT FINANCE / COFINANCE

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

Co-financing	GEF own fina	ancing (US\$)	Government		Other*		Total	
(type/source)			(US\$)		(US\$)		(US\$)	
	Planned	Actual	Planned	Actual	Planned	Actual	Actual	Actual

111	NP opuale, integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakistan								
Grants	3,400,000	3,400,000	34,315,82	34,315,82	521,938	521,938	38,237,758	38,237,75	
			0	0				8	
UNDP co-financing	75,000	75,000					75,000	75,000	
Loans/Concessions									
 In-kind support 					100,000	100,000	100,000	100,000	
• Other									
Totals	3,475,000	3,475,000	34,315,82	34,315,82	621,938	621,938	38,412,758	38,412,75	
			0	0				8	

Terminal Evaluation of UNDP-supported GEF-financed Project

MAINSTREAMING

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

IMPACT

The evaluators will assess the extent to which the project is achieving impacts or progressing towards the achievement of impacts. Key findings that should be brought out in the evaluations include whether the project has demonstrated: a) verifiable improvements in ecological status, b) verifiable reductions in stress on ecological systems, and/or c) demonstrated progress towards these impact achievements.⁵⁶

CONCLUSIONS, RECOMMENDATIONS & LESSONS

The evaluation report must include a chapter providing a set of **conclusions**, **recommendations** and **lessons**. Conclusions should build on findings and be based in evidence. Recommendations should be prioritized, specific, relevant, and targeted, with suggested implementers of the recommendations. Lessons should have wider applicability to other initiatives across the region, the area of intervention, and for the future.

IMPLEMENTATION ARRANGEMENTS

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

EVALUATION TIMEFRAME

The total duration of the evaluation will be 29 days for the international consultant) and 26 working days (for the national consultant) over a time period of 9 weeks according to the following plan:

Activity	Timing	Completion Date	
Preparation	5 working days	6 June 2017	
Evaluation Mission	11 working days (Astana – 3 days,	11-23 June 2017	
	Kostanay region – 3 days, including the		

⁵⁶ A useful tool for gauging progress to impact is the Review of Outcomes to Impacts (ROtI) method developed by the GEF Evaluation Office: <u>ROTI Handbook 2009</u>

Terminal Evaluation of UNDP-supported GEF-financed Project

Wir Opdate, integration of FOF3 into National Flamming and Fromoting Sound Heatricate Waste Management in Nazakiistan					
	flight between cities, East-Kazakhstan –				
	5 days)				
Draft Evaluation Report	10 working days	1-10 July 2017			
Final Report	3 working days (for the international	1-3 August 2017			
	consultant only)				

EVALUATION DELIVERABLES

The evaluation team is expected to deliver the following:

Deliverable	Content	Timing	Responsibilities
Inception	Evaluator provides	No later than 2 weeks	Evaluator submits to UNDP CO
Report	clarifications on timing	before the evaluation	
	and method	mission: due 6 June 2017	
Presentation	Initial Findings	End of evaluation mission:	To project management, UNDP
		due 23 June 2017	со
Draft Final	Full report, (per annexed	Within 2 weeks of the	Sent to CO, reviewed by RTA, PCU,
Report	template) with annexes	evaluation mission: due 10	GEF OFPs
		July 2017	
Final Report*	Revised report	Within 1 week of receiving	Sent to CO for uploading to UNDP
		UNDP comments on draft:	ERC.
		due 3 August 2017	

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

TEAM COMPOSITION

The evaluation team will be composed of 1 international evaluator and 1 national evaluator. The consultants shall have prior experience in evaluating similar projects. Experience with GEF financed projects is an advantage. The international evaluator will be designated as the Team Leader and will be responsible for finalizing the report. The evaluators selected should not have participated in the project preparation and/or implementation and should not have conflict of interest with project related activities.

The Team members must present the following qualifications:

- Master's degree in the sphere of chemical matters/ hazardous wastes, biology, medical sphere or other closely related fields;
- Minimum 5 years of professional experience in in chemical matters/ hazardous wastes, biology, medical sphere or other closely related fields;
- Experience with results-based monitoring and evaluation methodologies;
- Knowledge of results-based evaluation policies and procedures;
- Competence in Adaptive Management, as applied to chemicals and/or hazardous waste management projects;
- Recognized expertise in the management of chemicals and hazardous waste;
- Familiarity with chemicals and hazardous waste management policies and governance structures in Kazakhstan;
- Skills in drafting the institutional documents, reviews and background papers related chemicals and waste;

- "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan" Experience working with international organizations like UNDP and/or GEF or GEF-evaluations;
- Proven track record of application of results-based approaches to evaluation of projects focusing on chemicals and hazardous waste (relevant experience in the CIS region is a requirement; and relevant experience within UN system would be an asset)
- Excellent knowledge of English, communication and demonstrable analytical skills, knowledge of the Russian language is an advantage;
- Full proficiency in English both written and verbal including ability to review, draft guidelines and edit required project documentation; sound knowledge of Russian language would be an advantage
- Demonstrated understanding of issues related to gender and (fill in GEF Focal Area); experience in gender sensitive evaluation and analysis.

EVALUATOR ETHICS

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

PAYMENT MODALITIES AND SPECIFICATIONS

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

APPLICATION PROCESS

The following documents shall be sent by applicant:

- 1. Signed UNDP P11 form and detailed CV (up to 10 pages);
- 2. Duly accomplished Letter of Confirmation of Interest and Availability using the template provided by UNDP;
- 3. Financial Proposal that indicates the all-inclusive fixed total contract price, supported by a breakdown of costs, as per template provided. If an Offeror 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 Offeror must indicate at this point, and ensure that all such costs are duly incorporated in the financial proposal submitted to UNDP;
- 4. Cover letter to UNDP with description of similar consultancy assignments and other relevant information related to proposed methodology of work;
- 5. Two recommendation letters from similar projects within last 3 years.

*P11, the template for financial proposal and General terms and Conditions for Individual Contracts could be found here: <u>http://www.kz.undp.org/content/kazakhstan/en/home/operations/procurement/ic-contracts.html</u>

Criteria for Selection of the Best Offer

Initially, individual consultants shall be short-listed on the following minimum qualification criteria:

- Master's degree in the sphere of chemical matters/ hazardous wastes, biology, medical sphere or other closely related fields
- Minimum 5 years of professional experience in relevant natural sciences.

The shortlisted candidates will be further evaluated based on the following methodology:

Cumulative analysis

When using this weighted scoring method, the award of the contract should be made to the individual consultant whose offer has been evaluated and determined as:

Responsive/compliant/acceptable, and Suggesting the lowest price

"compliant/acceptable" can be determined as fully corresponding to the ToR.

- * Technical Criteria weight: 70%;
- * Financial Criteria weight: 30%

Minimum passing score for technical evaluation is 70% which is 350 points.

Criteria	Weight %	Max. points
Academic background and skills		
Master's degree in the sphere of chemical matters/ hazardous wastes, biology, medical sphere or other closely related fields	20%	100
Full proficiency in English both written and verbal including ability to review, draft guidelines and edit required project documentation; sound knowledge of Russian language would be an advantage	10%	50
Experience:		
Minimum 5 years of professional experience in in chemical matters/ hazardous wastes, biology, medical sphere or other closely related fields	25%	125
Proven track record of application of results-based approaches to evaluation of projects focusing on chemicals and hazardous waste (relevant experience in the CIS region is a requirement; and relevant experience within UN system would be an asset)	15%	75
Skills in drafting the institutional documents, reviews and background papers related chemicals and waste;	15%	75
Experience working with international organizations like UNDP and/or GEF or GEF-evaluations; Experience with results-based monitoring and evaluation methodologies;	15%	75
TOTAL	100%	500

TRAVEL:

All envisaged travel costs including trip to Astana (3 days), Kostanay region (3 days) and East-Kazakhstan region (5 days) and per diem must be included in financial proposal. In general, UNDP should not accept travel costs exceeding those of an economy class ticket. Should the IC wish to travel on a higher class he/she should do so using their own resources. In the case of unforeseeable travel, payment of travel costs including tickets, lodging and terminal expenses should be agreed upon, between the respective business unit and Individual Consultant, prior to travel and will be reimbursed.

LUMP SUM CONTRACT

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"NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan" The financial proposal shall specify a total lump sum amount, and payment terms around specific and measurable (qualitative and quantitative) deliverables (i.e. whether payments fall in installments or upon completion of the entire contract). Payments are based upon output, i.e. upon delivery of the services specified in the TOR. In order to assist the requesting unit in the comparison of financial proposals, the financial proposal will include a breakdown of this lump sum amount (including travel, per diems, and number of anticipated working days).

COA (MUST BE INDICATED IN NUMBERS)									
Project ID	Activity	Account	Amount	Fund	Dept ID	Impl	Donor		
-	-				-	Agency			
00085149	4	71200		62000	55205	001101	10003		
JOB DESCRIPTIO	JOB DESCRIPTION AUTHORISATION								
Supervisor									
Nina Gor/ Projec	t Manager								
Name/Title	Name/Title Signature								
Programme officer									
Victoria Baigazina/Programme Associate									
Name/Title				Signatur	e				

ANNEX A: PROJECT LOGICAL FRAMEWORK

Project's Strategy	Objective indicators	Baseline	Target	Verification	Assumption
				source	
The long-term objective environmental sustainal	that the project will contribu pility and enable them to pre	ute to: Communities, national, ar pare, respond and recover from	d local authorities use more effective natural and man-made disasters	e mechanisms and par	tnerships that promote
Objective: to reduce the releases of unintentionally produced POPs and other globally harmful	Stockholm Convention NIP update and improved institutional coordination on chemical MEAs	No inventory on POPs; NIP not updated; Fragmented legislation controls	Sources of uPOPs and new POPs identified; NIP updated to include new POPs, legislative gaps found and amendments prepared.	Experts' inventory reports, regulations adopted.	The government will focus efforts on improving the POPs monitoring system; the coordination center on
pollutants into the environment by promoting sound	Initial mercury inventory and reduction plan	No mercury inventory;	Mercury sources identified; recommendations for the	Inventory reports; letters; minutes	chemical conventions established.
healthcare waste management in	prepared		Minamata Convention prepared		accede to the Minamata
Kazakhstan, and to assist the country in implementing its relevant obligations under the Stockholm Convention	POPs emissions from healthcare waste incinerators reduced through a demonstration component, and wider replication of result	Waste segregation for waste source reduction is not a standard accepted approach in medical facilities; Reporting data; Routine waste incineration without emission controls and risk reduction measures is commonly practiced	Segregated waste collection introduced; non-incineration methods for treatment of infected wastes used by healthcare facilities;	Reports; letters; regulations	Non-incineration healthcare waste treatment plants are used by healthcare facilities. Mercury thermometers are no longer used in the healthcare system
POPs inventories improved for	POPs inventory mechanism established; industrial sources of uPOPs identified; industries using new	Lack of information about new POPs and uPOPs	POPs capacity building program	Reports, correspondence;	Government provides functional support
informed decision making and priority setting		No inventory of new POPs and uPOPs	Inventory of new POPS completed	regulations	
	POPs identified	No full range of POPs handled by existing laboratories	Methods for analyzing POPs in the environment developed; Laboratories for further accreditation identified;		
		Legislation contains only general requirements on POPs ;	Recommendations for the legislation on POPs management		
		No POPs coordination center in existence	Chemical conventions coordination center established		
		No confirmed data on environmental impact of POPs	POPs are monitored in industrial processes and environment		
Component 2: Mercury assessment implemented, national consultations held to identify	Capacity building programme for stakeholders and data tracking on risks	No previous efforts applied in relation to negotiations about Mercury Convention	Ratification of Minamata Convention prepared	Reports, correspondence, minutes	The government understands the gravity of the problem and
		accession			makes efforts to regulate the process. Environmental users have concerns about fulfilling their obligations to manage
priorities for actions and capacity building on mercury risks carried out	Mercury situation in Kazakhstan assessed	No mercury assessment, no mercury sources inventory	Initial mercury inventory	Reports, correspondence, no-objection procedure	

Terminal Evaluation of UNDP-supported GEF-financed Project

Project's Strategy	Objective indicators	Baseline	Target	Verification	Assumption
				source	
	Public awareness raising campaigns on mercury risks for health and environment conducted	Lack of understanding of a degree of impact on health	Mercury impact on human health assessed; Capacity building program on mercury; Seminars, trainings		mercury in industrial processes.
Component 3: Sound	Review of national			Memoranda on	
health-care waste management through uPOPs and mercury reduction approaches are demonstrated in 3	policies and update of HCWM regulatory framework	No comprehensive conceptual note on improving HCWM policies is in existence	Regulations on HCWM	cooperation, minutes, reports, regulations	
regions of the country					
		No standards on HCWM			
	Development of Regional HCWM Management Plan in selected provinces	No HCWM plans, reporting system needs improvement	The target indicators of the plans are included in the Program for the Development of Pilot Territories	programs	
	Replacement of mercury thermometers	No alternative to mercury thermometers	Mercury thermometers are replaced by electronic thermometers, followed by sound mercury wastes management.	Acceptance certificate	
	Establishment of HCW treatment centers at pilot sites	Health facilities have no access to organised waste treatment system, the waste is incinerated, pilot regions do not have non- incineration facilities	Functional HCW treatment centers. Emissions from uPOPS are reduced.	Certificates, reports	

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

- 1. GEF Project Information Form (PIF)
- 2. Project Document (ProDoc) endorsed by GEF CEO
- 3. Log Frame Analysis (LFA)
- 4. UNDP/GEF Project Document signed by UNDP and National Implementing Agency
- 5. Project Inception Report
- 6. Mid-Term Evaluation Report
- 7. Management Response to recommendations of Mid-Term Evaluation
- 8. Project quarterly (QORs and QPRs) and annual reporting (Project Implementation Reports [PIRs] and Annual Project Implementation Reports [APRs])
- 9. Minutes of Project Board meetings
- 10. Project budget and financial data
- 11. Project GEF Tracking Tool, at baseline, at mid-term, and at terminal points
- 12. Reports on monitoring of project office and pilot sites
- 13. ROARs
- 14. Project briefs and success stories
- 15. Project knowledge products
- 16. Government documentation (as an evidence of project outcomes achieved)

- 17. UNDP Development Assistance Framework (UNDAF)
- 18. UNDP Country Programme Document (CPD)
- 19. UNDP Country Programme Action Plan (CPAP)
- 20. GEF focal area strategic program objectives
- 21. List and contact details for project staff, key project stakeholders, including Project Boards, and other partners to be consulted
- 22. Project sites, highlighting suggested visits.
- 23. List of useful Project Links and Social Media:
- 1. <u>http://zhasyldamu.kz/proekt-proon/novosti/370-trening-praktika-bezopasnogo-</u> <u>obrashcheniya-so-stojkimi-organicheskimi-zagryaznitelyami-i-rtutyu-na-predpriyatiyakh-i-</u> <u>v-organizatsiyakh-prokhodit-v-ust-kamenogorske.html</u>
- 2. http://www.kap.kz/upload/files/93200_491004_08.pdf
- 3. <u>http://vko.kzpp.gov.kz/rus/presscentr/news/?cid=0&rid=3587</u>
- 4. hhttp://www.npc-ses.kz/ru/2-uncategorised/573-voprosy-sozov-v-kazakhstane.html
- 5. ttp://upr.astana.kz/?p=1211
- <u>http://zhasyldamu.kz/proekt-proon/novosti/382-obuchayushchij-trening-povyshenie-potentsiala-laboratorij-dlya-monitoringa-stojkikh-organicheskikh-zagryaznitelej-soz-i-rtuti-v-okruzhayushchej-srede.html</u>
- 7. <u>http://zhasyldamu.kz/proekt-proon/novosti.html</u>
- 8. <u>http://www.kz.undp.org/content/kazakhstan/ru/home/presscenter/pressreleases/2016/</u> 08/26/-.html
- 9. <u>http://zhasyldamu.kz/proekt-proon/novosti.html</u>
- 10. <u>http://zhasyldamu.kz/glavnaya/24-novosti-proekta/397-kruglyj-stol-po-voprosam-</u> monitoringa-stojkikh-organicheskikh-zagryaznitelej-v-okruzhayushchej-srede.html
- 11. http://zhasyldamu.kz/proekt-proon/novosti/405-trening-na-temu-opredelenie-stojkikhorganicheskikh-soedinenij-v-ob-ektakh-okruzhayushchhttp://zhasyldamu.kz/proektproon/novosti/400-ceminar-trening.html40
- 12. http://zhasyldamu.kz/proekt-proon/novosti/400-ceminar-trening.html40
- 13. http://24.kz/ru/vybor-redaktsii/item/167902-avtoklavy-dlya-obezvrezhivaniya-medotkh
- 14. <u>http://www.ng.kz/modules/news/article.php?storyid=25709</u>

Newspapers:

- 1. http://www.astanatv.kz/news/show/id/55794.html
- 2. <u>http://www.kazpravda.kz/news/obshchestvo/ustanovki-po-obezvrezhivaniu-meditsinskih-othodov-poyavyatsya-v-kostanaiskoi-oblasti/</u>
- 3. <u>https://i-</u> news.kz/news/2017/03/14/8460311v kostanae nachali rabotat avtoklavy dly.html
- 4. <u>http://alau.kz/v-kostanajskoj-oblasti-pojavilis-obezzarazhivateli-dlja-medicinskih-othodov/</u>
- 5. <u>https://qostanay.tv/tehnologii/v-kostanayskoy-oblasti-nachali-bezopasno-obezvrezhivat-</u> <u>medothody</u>

- 6. https://ustinka.kz/kazakhstan/medicine/24749.html?sphrase_id=713310 Газета
- 7. <u>http://yk-news.kz/news/%D0%B2-%D0%B2%D0%BA%D0%BE-%D0%BE%D0%BA%D0%BE%D0%BB%D0%BE%D0%BE%D0%BE%D0%BE%D0%BE%D0%BE%D0%BE%D0%BE%D0%BE%D0%B2%D0%BE%D0%BE%D0%BB%D1%86%D0%B8%D1%86-%D0%B2%D0%B2%D0%B1%D1%80%D0%B0%D1%81%D1%8B%D0%B2%D0%B0%D1%8E
 <u>%D0%B2%D1%88%D0%B1%D1%80%D0%B0%D1%81%D1%8B%D0%B2%D0%B0%D1%8E
 <u>%D0%BC%D0%B5%D0%B4%D0%B8%D1%86%D0%B8%D0%BD%D1%81%D0%BA%D0%B8
 <u>%D0%B5-%D0%BE%D1%82%D1%85%D0%BE%D0%B4%D1%8B%D0%B5<u>%D0%BC%D1%83%D1%81%D0%BE%D1%80%D0%BD%D1%8B%D0%B5<u>%D0%B1%D0%BA%D0%BE%D1%80%D0%B5%D0%B5<u>%D0%B1%D0%BA%D0%B8</u></u></u></u></u></u></u>

Information Portal:

- 1. <u>https://liter.kz/mobile/ru/news/show/30204-</u> proon zapustila ustanovki po bezopasnomu obezvrezhivaniyu medicinskih othodov
- 2. <u>http://kstnews.kz/news/society?node=35957</u>
- 3. <u>http://newsvideo.su/video/6203756</u>
- 4. <u>http://khabar.kz/ru/news/v-mire/item/79476-v-proon-pokazali-kak-bezopasno-utilizirovat-medotkhody</u>

TV broadcasting:

- 1. <u>http://www.arnapress.kz/aktobe/health/92756/</u>
- 2. <u>http://rudnyi-altai.kz/9059-utiliziruem-pravilno-i-bezopasno.html</u>
- 3. <u>http://www.kz.undp.org/content/kazakhstan/ru/home/presscenter/pressreleases/2017/03/14</u> /-.html
- 4. <u>http://pharmnews.kz/ru/news/kak-obezvrezhivayut-medicinskie-othody-v-astane 11555</u>
- 5. http://pharmnews.kz/ru/news/kak-obezvrezhivayut-medicinskie-othody-v-astane 11555
- 6. <u>http://jupiter.ratel.kz/kaz/v astane dlja obezvrezhivanija meditsinskih othodov prime</u> <u>njat spetsustanovki</u>
- 7. <u>http://zhasyldamu.kz/ru/proekt-proon/novosti/475-prooom-zapusk.html</u>
- 8. <u>http://bnews.kz/ru/redesign/news/unichtozhat_medothodi_v_kostanae_budut_ponovo</u> <u>mu</u>

ANNEX C: EVALUATION QUESTIONS

This Evaluation Criteria Matrix must be fully completed/amended by the consultant and included in the TE inception report and as an Annex to the TE report.

Evaluative Criteria Questions	Indicators	Sources	Methodology		
Relevance: How does the project relate to the main objectives of the GEF focal area, and to the environment and development priorities at the local, regional and national levels?					
• Are project outcomes contributing to national development priorities and plans in accordance with the national legal and regulatory frameworks?	Changes and amendments to the regulations	 Project reporting, national statistics and reporting 	 UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review 		
How has the project contributed to reduction of uPOPs emissions?	% reduction of uPOPs from healthcare wastes incineration	 Project reporting, national statistics and reporting 	 UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review 		
Effectiveness: To what extent have the expected outcom	es and objectives of the project been achieve	d?			
• Are the achieved project outcomes commensurate with the original or modified project objectives?	• Yes/No	 Project reporting 	 UNDP/GEF Monitoring & Evaluation Policies, Project reporting review 		
• Whether the project outcomes provided the most effective way towards results?	• Yes/No	 Project reporting, national statistics and reporting 	 UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review 		
• The degree of efficiency of the HCWM system proposed within the framework of the project	 Same methods are used in other regions 	 Project reporting, national statistics and reporting 	 UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review 		
Efficiency: Was the project implemented efficiently, in-li	ne with international and national norms and	standards?			
• How efficient was the financial management of the project, including specific reference to cost-effectiveness of its interventions?	• Extent to which results have been delivered with the least costly resources possible	 Project reporting 	UNDP/GEF Monitoring & Evaluation Policies, Project reporting review		
What was the role of UNDP and National Implementing Agency in meeting the	 Extent of influence to ensure meeting the required international standards 	Project reporting	 UNDP/GEF Monitoring & Evaluation Policies, Project reporting review 		

Terminal Evaluation of UNDP-supported GEF-financed Project "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan"

requirements set out in UNDP Programme and Operations Policies and Procedures?			
 Are the systems for accountability and transparency of project management approach/results and meeting the relevant national norms and standards in place? 	 # of national norms and standards met 	 Project and national reporting 	 UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
Sustainability: To what extent are there financial, institu	utional, social-economic, and/or environment	al risks to sustaining long-term pro	ect results?
 Whether the risks identified in project document and PIRs were appropriate and corresponding risk management strategies/systems were adopted and implemented? 	Extent of risk appropriatenessYes/No	 Project reporting, UNDP-GEF Risk Management System 	 UNDP/GEF Monitoring & Evaluation Policies
• Whether or not national stakeholders participated in project management and decision-making have ownership for project outcomes and their further replication and scaling-up?	• Yes/No	 Project reporting, government reporting/documentation 	 UNDP/GEF Monitoring & Evaluation Policies, Project and government documentation review
 Was the project sustainability strategy relevant and efficient? 	• Yes/No	 Project reporting; national evidences 	 UNDP/GEF Monitoring & Evaluation Policies, Project and government documentation review
• Are there any environmental risks that may pose a threat to the sustainability of the project outcomes?	• No/No	•	•
Impact: Are there indications that the project has cont	ributed to, or enabled progress toward, redu	ced environmental stress and/or i	mproved ecological status?
• What contribution was made by the established HCW treatment centers in improving the environmental situation in the pilot regions?	 uPOPs and other pollutants emissions reduced 	 Project reporting, government reporting/documentation/st atistics 	 UNDP/GEF Monitoring & Evaluation Policies, Project and government documentation review
 How the project did enable reducing pressure on corresponding natural resources (e.g. through reduced use of primary energy sources, and/or use of renewables)? 	 It is possible to use healthcare wastes as secondary raw materials 	 Project reporting, government reporting/documentation/st atistics 	 UNDP/GEF Monitoring & Evaluation Policies, Project and government documentation review

ANNEX D: RATING SCALES

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

ANNEX E: EVALUATION CONSULTANT CODE OF CONDUCT AND AGREEMENT FORM

Evaluators:

- 1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
- 2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
- 3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
- 4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
- 5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact 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.
- 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.

Evaluation Consultant Agreement Form ⁵⁷
Agreement to abide by the Code of Conduct for Evaluation in the UN System
Name of Consultant:
Name of Consultancy Organization (where relevant):
I confirm that I have received and understood and will abide by the United Nations Code of Conduct for
Evaluation.

⁵⁷www.unevaluation.org/unegcodeofconduct

Signed at *place* on *date*

Signature:

ANNEX F: EVALUATION REPORT OUTLINE⁵⁸

i. Opening page: Title of UNDP supported GEF financed project UNDP and GEF project ID#s.

- Evaluation time frame and date of evaluation report
- Region and countries included in the project
- GEF Operational Program/Strategic Program
- Implementing Partner and other project partners
- Evaluation team members
- Acknowledgements
- ii. Executive Summary
 - Project Summary Table
 - Project Description (brief)
 - Evaluation Rating Table
 - Summary of conclusions, recommendations and lessons
 - Acronyms and Abbreviations
 - (See: UNDP Editorial Manual⁵⁹)
- 1. Introduction

iii.

- Purpose of the evaluation
- Scope & Methodology
- Structure of the evaluation report
- 2. Project description and development context
 - Project start and duration
 - Problems that the project sought to address
 - Immediate and development objectives of the project
 - Baseline Indicators established
 - Main stakeholders
 - Expected Results

3. Findings

(In addition to a descriptive assessment, all criteria marked with (*) must be rated⁶⁰)

- **3.1** Project Design / Formulation
 - Analysis of LFA/Results Framework (Project logic /strategy; Indicators)
 - Assumptions and Risks
 - Lessons from other relevant projects (e.g., same focal area) incorporated into project design

⁵⁸The Report length should not exceed 40 pages in total (not including annexes).

⁵⁹ UNDP Style Manual, Office of Communications, Partnerships Bureau, updated November 2008

 ⁶⁰ Using a six-point rating scale: 6: Highly Satisfactory, 5: Satisfactory, 4: Marginally Satisfactory, 3: Marginally Unsatisfactory,
 2: Unsatisfactory and 1: Highly Unsatisfactory, see section 3.5, page 37 for ratings explanations.

- Planned stakeholder participation
- Replication approach
- UNDP comparative advantage
- Linkages between project and other interventions within the sector
- Management arrangements

3.2 Project Implementation

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

3.3 Project Results

- Overall results (attainment of objectives) (*)
- Relevance(*)
- Effectiveness & Efficiency (*)
- Country ownership
- Mainstreaming
- Sustainability (*)
- Impact
- 4. Conclusions, Recommendations & Lessons
 - Corrective actions for the design, implementation, monitoring and evaluation of the project
 - Actions to follow up or reinforce initial benefits from the project
 - Proposals for future directions underlining main objectives
 - Best and worst practices in addressing issues relating to relevance, performance and success

5. Annexes

- ToR
- Itinerary
- List of persons interviewed
- Summary of field visits
- List of documents reviewed
- Evaluation Question Matrix
- Questionnaire used and summary of results
- Evaluation Consultant Agreement Form
- Annexed in a separate file: TE audit trail
- Annexed in a separate file: Terminal GEF Tracking Tool

ANNEX G: EVALUATION REPORT CLEARANCE FORM

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

ANNEX H: TE REPORT AUDIT TRAIL

The following is a template for the evaluator to show how the received comments on the draft TE report have (or have not) been incorporated into the final TE report. This audit trail should be included as an annex in the final TE report.

To the comments received on (*date*) from the Terminal Evaluation of (*project name*) (UNDP *PIMS #*)

The following comments were provided in track changes to the draft Terminal Evaluation report; they are referenced by institution ("Author" column) and track change comment number ("#" column):

Author	#	Para No./ comment location	Comment/Feedback on the draft TE report	TE team response and actions taken

ANNEX 2: TIMELINE OF DELIVERABLES

The total duration of the evaluation will be 29 days for the international consultant) and 26 working days (for the national consultant) over a time period of 9 weeks according to the following plan:

Activity	Timing	Completion Date
Preparation	5 working days	6 June 2017
Evaluation Mission	11 working days (Astana – 3 days, Kostanay region – 3 days, including the flight between cities, East-Kazakhstan – 5 days)	10 - 21 July 2017
Draft Evaluation Report	10 working days	1-10 August 2017
Final Report	3 working days (for the international consultant only)	21-23 August 2017

The Evaluator is expected to deliver the following:

Deliverable	Content	Timing	Responsibilities
Inception	Evaluator provides	No later than 2 weeks before	Evaluator submits to UNDP CO
Report	clarifications on timing	the evaluation mission: due 6	
	and method	June 2017	
Presentation	Initial Findings	End of evaluation mission:	To project management, UNDP CO
		due 21 July 2017	
Draft Final	Full report, (per annexed	Within 2 weeks of the	Sent to CO, reviewed by RTA, PCU,
Report	template) with annexes	evaluation mission: due 10	GEF OFPs
		August 2017	
Final Report*	Revised report	Within 1 week of receiving	Sent to CO for uploading to UNDP
		UNDP comments on draft:	ERC.
		due 23 August 2017	

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

ANNEX 3: PROGRAMME OF COUNTRY VISISTS

TIME	ACTIVITY	PLACE				
	10 July, 2017, East Kazakhsi	tan				
17.55 - 19.20	17.55 - 19.20 Departure from Almaty to Ust-Kamenogorsk (flight KC 303)					
	11 July, 2017, East Kazakhsi	tan				
10.00-13.00	Meeting with the head Mr.Ermek Omarbekov, senior doctor of PSE on REM "Center of Mother and Child" under the Healthcare Department of East-Kazakhstan Regional Akimat. Checking the use of autoclaves for healthcare waste treatment. Control and monitoring of autoclaving systems.	PSE on REM "Center of Mother and Child" under the Healthcare Department of East-Kazakhstan Regional Akimat				
13.00 - 14.00		lunch				
14.00-17.30	Meeting with Ms. Tatyana Kozlyanskaya, Head of the Laboratory of the East Kazakhstan Branch of the RSE "Kazgidromet"	RSE "Kazgidromet" of East-Kazakhstan oblast				
	12 July, 2017, East Kazakhst	tan				
The whole day	Visiting of the Centers of Medical Wastes decontamination. Meeting with epidemiologist of PSE on REM "Central Rayon Hospital of Katon-Karagay Rayon" under the Healthcare Department of East-Kazakhstan Regional Akimat.	Ulken Naryn village (including the time for travel) Katon-Karagai village (including the time for travel)				
	13 July, 2017, East	Kazakhstan				
10.00-11.00	Meeting with the Mr. Sergey Popov, representative of Public Health Department of East-Kazakhstan oblast	# 4 city hospital				
13.00-14.00	lunch					
14.00-17.00	Work with Project team on autoclave's work and meetings with partners	Conference room of Irtysh hotel				
	14 July, 2017, East K	Kazakhstan				
10.00-12.00	Meeting with Ms. Gulyaim Tagayeva, Deputy Chief, of Department for the Protection of Public Health of East- Kazakhstan region	Department for the Protection of Public Health of East-Kazakhstan region				
13:00-14:00		lunch				
14.00-18.00	Work with documentation					
	15 July, 2017, Astana	1				
16:05-17.40Departure from Ust-Kamenogorsk to Astana (flight KC 246)						
16 July, 2017, Astana						
15.00-16.20	Departure from Astana to Kostana	y (flight KC 323)				
	17 July 2017, Kostanay					
09.00 - 12.00	Preparation of documentation. Arrival of Project team from	Astana				
13.00 - 14.00	Departure from Kostanay to Rudniy	lunch				
14.00-15:00	Departure from Rostanay to Rudiny					

15:00-17:00	Meeting with Mr. Talgat Kaikenov, Senior Doctor of PSE "Rudnyi Municipal Hospital" under the Healthcare Department of Akimat of Kostanay region. Checking the use of autoclaves for healthcare waste treatment. Control and monitoring of autoclaving systems.	PSE "Rudnyi Municipal Hospital" under the Healthcare Department of Akimat of Kostanay region
17.00-18:00	Departure from Kostanay to Rudniy	
	18 July 2017,	Kostanay
10.00-10-40.	Meeting with Mr. Aslan Zhanyspayev, Deputy to Chief Officer on general economic issues of Public Health Department of Kostanay Region	Public Health Department of Kostanay region
11.15- 11.45	Visiting and examination of incinerator's work of Narcological dispensary of Kostanay region	Narcological dispensary of Kostanay region, Zatobolka village
12.30-13.30	Meeting with Mr. Sergey Karpluk, Deputy Akim of Kostanay region	Akimat of Kostanay Region
13.30-14.00	Meeting with Mr. Nazar Dyusebayev, Head of "Kostanay ecomedutilizatsiya 2016" LLP	"Kostanay ecomedutilizatsiya 2016" LLP
14.00-15.00		lunch
15.15 - 16.00	Meeting with Mrs. Svetlana Aresntyeva, Head of the unit of department of Natural Resources and Environmental Governance of Kostanay Region.	Department of Natural Resources and Environmental Governance of Kostanay Region
16.00 - 17.30	Meeting with Mr, Samat Kaliyev, OIC to Head of department of Natural Resources and Environmental Governance of Kostanay Region.	Department of Natural Resources and Environmental Governance of Kostanay Region
	19 July 2017, Kostanay/Asta	na
11.15-12.25	Departure from Kostanay to Astana (flight KC 336)	
13:00-14.00		Lunch
14:00-17:00	Visiting LLP "MEDOX". Checking the use of autoclaves for systems. Meeting with Mr.Ospanov Yerkin, Head of LLP "M	r healthcare waste treatment. Control and monitoring of autoclaving MEDOX"
	20 July 2017, Astana	
09.30-10.30	Meeting with Ms. Zhanar Assanova, Director of Waste Management Department JSC "Zhasyl Damu"	JSC "Zhasyl Damu"
10.30-11.00	Meeting with the Ms. Zhuldyz Urazbekova, Senior Expert of Committee for the Protection of Public Health of the Ministry of Healthcare of the Republic of Kazakhstan	JSC "Zhasyl Damu"
11.00-11.30	Meeting with Ms.Assel Kassenova, Head of the industrial waste management unit of Ministry of Energy of RK	Ministry of Energy of RK
11.35-12.45	Meeting with Ms. Olga Melnik, Head of the Realization Conception of Green Economy Unit of Ministry of Energy of RK	Ministry of Energy of RK
13.00 - 14.00		lunch
14.00-16.00	Meeting with the Project team	Project office, Beibitshilik 8, of.2
16.00-16.30	Skype call with Mr.Maksim Surkov, Regional Technical Advisor, Istanbul HUB	Project office, Beibitshilik 8, of.2
16.30-18.00	Working with project documentation	Project office, Beibitshilik 8, of.2
	21 July 2	017
	Meeting with Ms. Zhanetta Babasheva, Resources	UNDP country office
09.30-10.30	Monitoring Associate, UNDP	13, Mambetov street
10:30-12.30	Meeting with Ms. Victoria Baigazina, Programme Associate of SDU Unit, UNDP	UNDP country office 13, Mambetov street
13.00 - 14.00		lunch

	Work with the Project Team. Discussion on comments after	
14:00-18:00	the meeting held	Project staff
22.35	Departure from Astana to Almaty (flight KC 856)	

ANNEX 4: EVALUATION CONSULTANT CODE OF CONDUCT AND AGREEMENT FORM

Evaluators:

- 8. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
- 9. 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.
- 10. 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.
- 11. 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.
- 12. 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.
- 13. 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.
- 14. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form⁶¹

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

Name of Consultant: Zharas Takenov

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

Signed at Almaty, Kazakhstan on 21 June 2017 VII vo Africas Car S

Signature:

⁶¹www.unevaluation.org/unegcodeofconduct

ANNEX 5: PROPOSED INTERVIEW LIST

Project

#	Name	Title	Organization
1	Ms. Nina Gor	Project Manager	
2	Ms. Assel Shakhanova	Expert on healthcare waste and mercury pollution management	
3	Ms. Saltanat Bayeshova	Expert on capacity building in the field of persistent organic pollutants and other	LINDR/GEE project
		harmful chemical substances	onder project
4	Ms. Zulfiya	Project Assistant	
5	Ms. Madina Kassenova	Procurement Assistant	

UNDP

#	Name	Title	Organization
1	Mr. Maksim Surkov	UNDP-GEF RTA	UNDP, Istanbul
2	Mr. Rassul Rakhimov	Head of SDU unit	
3	Ms. Victoria Baigazina	Programme Associate of SDU unit, project supervisor	UNDP CO
4	Ms. Zhanetta Babasheva	M&E focal point	

GEF Operational Focal Point

#	Name	Title	Organization
1	Mr. Gani Sadibekov	Vice Ministry	Ministry of Energy of the Republic
			of Kazakhstan

Ministry of Energy of RK – Main Partner

#	Name	Title	Organization
1	Ms. Bizara Dosmakova	Deputy Director of the Waste Management Department, National Project Director	Waste Management Department,
			Ministry of Energy of RK

Project Partners

Terminal Evaluation of UNDP-supported GEF-financed Project "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan" "

#	Name	Title	Organization
1	Zhan Nurbekov	Director of Waste Management Department	Ministry of Energy of RK
2	Zhanar Asanova	Head of the Ownerless Waste Management Department	JSC "Damu Zhasyl" under the Ministry of Energy of the Republic of Kazakhstan
3	Zhuldyz Urazbekova	Head Expert of Sanitary and Hygienic Surveillance Department	Committee for Public Health Protection under the Ministry of Public Healthcare of RK
4	Danara Alimbayeva	Director of the Environmental Monitoring Department	Kazhydromet
5	Samat Kaliyev	Deputy Head	Department of Natural Resources and Environmental Governance of Kostanay region
6	Svetlana Arsentyeva	Head of Unit	Department of Natural Resources and Environmental Governance of Kostanay region
7	Vladimir Mikhailenko	Chief Doctor of "Kostanay Regional Narcological Dispensary"	
8	Sergey Mukashev	Specialist of State Environmental Control Unit	Department of Ecology of Kostanay region
9	Tatyana Kozlyanskaya	Head of the Integrated Environmental Monitoring Laboratory	Branch of the RSE "Kazhydromet" for East Kazakhstan region
10	Sergey Popov	Head of the Center	Center of Mother and Child of East-Kazakhstan region
11	Kazken Orazalina	Expert on chemicals	NGO
12	Kavira Mukasheva	Senior teacher Department of Occupational Health, Communal Hygiene	JSC "Medical University of Astana"
ANNEX 6: DESK REVIEW BIBLIOGRAPHY

- 1. GEF Project Information Form (PIF)
- 2. Project Document (ProDoc)
- 3. Log Frame Analysis (LFA)
- 4. UNDP/GEF Project Document signed by UNDP and National Implementing Agency
- 5. Project Inception Report
- 6. Mid-Term Evaluation Report
- 7. Management Response to recommendations of Mid-Term Evaluation
- 8. Project quarterly (QORs and QPRs) and annual reporting (Project Implementation Reports [PIRs] and Annual Project Implementation Reports [APRs])
- 9. Minutes of Project Board meetings
- 10. Project budget and financial data
- 11. Project GEF Tracking Tool, at baseline, at mid-term, and at terminal points
- 12. Reports on monitoring of project office and pilot sites
- 13. ROARs
- 14. Project briefs and success stories
- 15. Project knowledge products
- 16. Government documentation (as an evidence of project outcomes achieved)
- 17. UNDP Development Assistance Framework (UNDAF)
- 18. UNDP Country Programme Document (CPD)
- 19. UNDP Country Programme Action Plan (CPAP)
- 20. GEF focal area strategic program objectives
- 21. List and contact details for project staff, key project stakeholders, including Project Boards, and other partners to be consulted

ANNEX 7: EVALUATION SITE VISIT LOCATIONS

The Evaluator spent 11 working days for the field mission in Astana (3 days), Kostanay (3 days) and East-Kazakhstan regions (5 days) from 10 - 21 July 2017. The evaluator conducted its field mission to the following project sites:

- "MEDOX" LLP in Astana city;
- ➤ "Kostanay ECOMEDUTILIZATSIYA 2016" LLP in Kostanay city;
- > PSE on REM "ZHITIKARA Central Rayon Hospital" in Kostanay region;
- > PSE on REM "RUDNYI Municipal Hospital" in Kostanay region;
- > PSE on REM "Center of Mother and Child" in Ust-Kamenogorsk city (East-Kazakhstan region);
- > PSE on REM "Central Rayon Hospital of Katon-Karagay Rayon" in East-Kazakhstan region;

ANNEX 8: PROJECT RESULT RESOURCES FRAMEWORK

Project's Strategy	Objective indicators	Baseline	Target	Verification	Assumption			
				source				
The long-term objective that the project will contribute to: Communities, national, and local authorities use more effective mechanisms and partnerships that promote environmental sustainability and enable them to prepare, respond and recover from natural and man-made disasters								
Objective: to reduce the releases of unintentionally produced POPs and other globally harmful	Stockholm Convention NIP update and improved institutional coordination on chemical MEAs	No inventory on POPs; NIP not updated; Fragmented legislation controls	Sources of uPOPs and new POPs identified; NIP updated to include new POPs, legislative gaps found and amendments prepared.	Experts' inventory reports, regulations adopted.	The government will focus efforts on improving the POPs monitoring system; the coordination center on			
environment by	Initial mercury inventory and reduction plan	No mercury inventory;	Mercury sources identified; recommendations for the	Inventory reports; letters; minutes	established.			
healthcare waste management in Kazakhstan, and to assist the country in implementing its relevant obligations under the Stockholm Convention	prepared		Government on accession to Minamata Convention prepared		Steps will be taken to accede to the MInamata			
	POPs emissions from healthcare waste incinerators reduced through a demonstration component, and wider replication of result	Waste segregation for waste source reduction is not a standard accepted approach in medical facilities; Reporting data; Routine waste incineration without emission controls and risk reduction measures is commonly practiced	Segregated waste collection introduced; non-incineration methods for treatment of infected wastes used by healthcare facilities;	Reports; letters; regulations	Non-incineration healthcare waste treatment plants are used by healthcare facilities. Mercury thermometers are no longer used in the healthcare system.			
Component 1: POPs inventories	POPs inventory mechanism established;	Lack of information about new POPs and uPOPs	POPs capacity building program	Reports, correspondence;	Government provides functional support			
improved for informed decision making and priority	industrial sources of uPOPs identified; industries using new	No inventory of new POPs and uPOPs	Inventory of new POPS completed	regulations				
setting	POPs identified	No full range of POPs handled by existing laboratories	Methods for analyzing POPs in the environment developed; Laboratories for further accreditation identified;					

Project's Strategy	Objective indicators	Baseline	Target	Verification	Assumption
				source	
		Legislation contains only general requirements on POPs ;	Recommendations for the legislation on POPs management		
		No POPs coordination center in existence	Chemical conventions coordination center established		
		No confirmed data on environmental impact of POPs	POPs are monitored in industrial processes and environment		
Component 2: Mercury assessment implemented, national consultations held to identify priorities for actions and capacity building on mercury risks carried out	Capacity building programme for stakeholders and data tracking on risks	No previous efforts applied in relation to negotiations about Mercury Convention accession	Ratification of Minamata Convention prepared	Reports, correspondence, minutes	The government understands the gravity of the problem and makes efforts to regulate the process.
	Mercury situation in Kazakhstan assessed	No mercury assessment, no mercury sources inventory	Initial mercury inventory	Reports, correspondence, no-objection procedure	have concerns about fulfilling their obligations to manage mercury in industrial processes.
	Public awareness raising campaigns on mercury risks for health and environment conducted	Lack of understanding of a degree of impact on health	Mercury impact on human health assessed; Capacity building program on mercury; Seminars, trainings		
Component 3: Sound	Review of national			Memoranda on	
health-care waste management through uPOPs and mercury reduction approaches are demonstrated in 3	policies and update of HCWM regulatory framework	No comprehensive conceptual note on improving HCWM policies is in existence	Regulations on HCWM	cooperation, minutes, reports, regulations	
regions of the country					
		No standards on HCWM			
	Development of Regional HCWM	No HCWM plans, reporting system needs improvement	The target indicators of the plans are included in the Program for	programs	

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Project's Strategy	Objective indicators	Baseline	Target	Verification	Assumption
				source	
	Management Plan in selected provinces		the Development of Pilot Territories		
	Replacement of mercury thermometers	No alternative to mercury thermometers	Mercury thermometers are replaced by electronic thermometers, followed by sound mercury wastes management.	Acceptance certificate	
	Establishment of HCW treatment centers at pilot sites	Health facilities have no access to organised waste treatment system, the waste is incinerated, pilot regions do not have non- incineration facilities	Functional HCW treatment centers. Emissions from uPOPS are reduced.	Certificates, reports	

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ANNEX 9: EVALUATION CORE QUESTIONS

Evaluation criteria and questions presents the evaluation questions mapped against the evaluation criteria from the TOR: Based on the initial deskwork document review, the evaluator has proposed additions to the overarching evaluation questions. The proposed evaluation questions with research and clarification questions and sub-questions are the following⁶²:

Finding area	Criteria	EVALUATION AND RESEARCH QUESTIONS	INDICATORS	SOURCES	METHODOLOGY
	Relevance: How do national levels?	es the project relate to the main objectives of the GEF f	ocal area, and to the environment and o	levelopment priorities at the lo	cal, regional and
		1.1.1. Are project outcomes contributing to national development priorities and plans in accordance with the national legal and regulatory frameworks?	 Changes and amendments to the regulations 	Project reporting, national statistics and reporting	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
1. PROJECT STRATEGY	1.1. Project relevance	1.1.2. How has the project contributed to reduction of uPOPs emissions?	 % reduction of uPOPs from healthcare wastes incineration 	Project reporting, national statistics and reporting	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
		1.1.3. How did the project contribute to establishing Mercury emission standard and enforcement within the project implementation cycle and beyond?	 Legislative options reports and draft regulations Published official documentation (law, state programs, etc.). Project reporting, national statistics and reporting, interviews, sit visit 	• Project reporting, national statistics and reporting, interviews, site visit	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review

⁶² The questions for each interview will be specified depending on the experience and involvement in the project design and implementation of the interviewed persons. See also ANNEX 11: Evaluation Design Matrix.

"

	1.1.4. Was the project's positioning vis a vis other sectoral initiatives relevant?	Yes/No	 Project reporting, national statistics and reporting, interviews 	• UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
Effectiveness: To w	hat extent have the expected outcomes and objectives	of the project been achieved?		
	1.2.1. Are the achieved project outcomes commensurate with the original or modified project objectives?	Yes/No	Project reporting	UNDP/GEF Monitoring & Evaluation Policies, Project reporting review
	1.2.2. Whether the project outcomes provided the most effective way towards results?	Yes/No	Project reporting, national statistics and reporting	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
1.2. Approach to implementation/ coherence	1.2.3. The degree of efficiency of the HCWM system proposed within the framework of the project.	Same methods are used in other regions	Project reporting, national statistics and reporting	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
	1.2. 4. In what way and why do project strategies contribute to the attainment of deliverables, final outcomes and objective?	•Evidences of UNDP GEF incremental assistance.	 Project reporting, national statistics and reporting, interviews 	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review

	1.2.5. Are the project strategies relevant and do they ensure the most effective way of achieving the outcomes?	• Yes/No.	Project reporting, national statistics and reporting, interviews	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
	1.2.6. Are final outcomes prepared at the initial stage still the best strategy for the attainment of project objectives (considering the changed factors)?	• Yes/No.	Project reporting, national statistics and reporting, interviews	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
	1.3.1. Are project objective and components clear, practically attainable and feasible within the timeframe specified? If not, please elaborate why?	• Yes/No.	Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
1.3. Preparation and preparedness	1.3.2. Was the potential of executive partner, Ministry of Energy, Ministry of Environmental Protection and other partners properly considered during project design? If not, please explain why?	• Yes/No.	Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
	1.3.3. Were the lessons learned during other projects properly considered during project design?	Lessons learned logs properly fulfilled.	Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review

1.3.4. Were partnership mechanisms properly • Yes/No. • Project reporting, • UNDP/GEF considered and were negotiations on relevant national statistics and Monitoring & responsibilities of the parties held prior to project reporting, interviews, site Evaluation Policies, approval? If not please provide details. Project and visits government reporting/statistics review 1.3.5. Were partners' resources (funding, staff, • Yes/No. • Project reporting, • UNDP/GEF premises) authorizing the legislation and adequate national statistics and Monitoring & mechanisms of project management provided at the reporting, interviews, site Evaluation Policies, initial stage of the project? If not please provide visits Project and details. government reporting/statistics review 1.3.6. Is there a sustainability strategy prepared • Yes/No. • Project reporting, • UNDP/GEF during project design? If yes, what is its relevance? national statistics and Monitoring & reporting, interviews, site Evaluation Policies, visits Project and government reporting/statistics review 1.4.1. Did the project involve relevant parties • Yes/No. • UNDP/GEF Project reporting, concerned by means of information exchange, Monitoring & national statistics and consultations and overall involvement into project Evaluation Policies, reporting, interviews, site Project and design? If not, please provide details. visits government 1.4. Involvement reporting/statistics of parties review 1.4.2. How the project consulted and used skills, Examples of evidence. Project reporting, • UNDP/GEF concerned experience and knowledge of relevant state national statistics and Monitoring & authorities, NGOs, public groups, private sector, local reporting, interviews, site **Evaluation Policies**, authorities and academic institutions during the visits Project and design of project activities? government reporting/statistics review

	1.5.1. What are the underlying factors that go beyond project control framework and influence on final outcomes?	Evidences and mitigation measures.	Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
1.5. Underlying factors and assumptions	1.5.2. Were the assumptions made by project management valid?	• Yes/No.	• Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
	1.5.3. What is the impact of any wrong assumption made by the project?	Evidences and mitigation measures.	 Project reporting, national statistics and reporting, interviews, site visits 	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
1.6. Management	1.6.1. Were project roles properly distributed during project design?	• Yes/No.	 Project reporting, national statistics and reporting, interviews, site visits 	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
mechanisms	1.6.2. Do the roles within the project framework properly comply with UNDP and GEF guidance?	• Yes/No.	 Project reporting, national statistics and reporting, interviews, site visits 	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review

"

	1.6.3. Can the model of management mechanisms proposed by the project be considered optimal? If not, add suggestions and recommendations.	• Yes/No.	Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
1.7. Project budget and	1.7.1. Were the budget and duration of the project is effectively planned from the point of view of expenses (cost-effectiveness)?	• Yes/No.	 Project reporting, national statistics and reporting, interviews, site visits 	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
duration	1.7.2. Was the project budget and duration updated, extended, added, etc.? If yes, please give details.	• Yes/No.	• Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
1.8. System of project	1.8.1. Does the project have a convincing monitoring and evaluation plan for following up the outcomes and progress assessment in the achievement of project objectives?	• Yes/No.	Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
monitoring and evaluation	1.8.2. Does the project monitoring and evaluation plan include preconditions (including data, methodology, etc.), SMART indicators and the system of data analysis as well as evaluation study at specific times for assessing the outcomes and relevant funding of monitoring and evaluation activities?	• Yes/No.	Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review

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		1.8.3. Do the timeframes for various activities on monitoring and evaluation and standards on sub- outcomes were indicated?	• Yes/No.	• Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
	Efficiency: Was the	e project implemented efficiently, in-line with internation	nal and national norms and standards?		
		2.1.1. How efficient was the financial management of the project, including specific reference to cost- effectiveness of its interventions?	• Extent to which results have been delivered with the least costly resources possible	Project reporting	UNDP/GEF Monitoring & Evaluation Policies, Project reporting review
2. PROJECT IMPLEMENTATION	2.1. Adaptive management within project framework	2.1.2. What was the role of UNDP and National Implementing Agency in meeting the requirements set out in UNDP Programme and Operations Policies and Procedures?	Extent of influence to ensure meeting the required international standards	Project reporting	UNDP/GEF Monitoring & Evaluation Policies, Project reporting review
		2.1.3. Are the systems for accountability and transparency of project management approach/results and meeting the relevant national norms and standards in place?	# of national norms and standards met	Project and national reporting	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
		 2.1.4. What is the quality of the monitoring system used, including the tools? Clarification sub-questions: Do they ensure the information required? Do they involve key partners? Are they effective? 	• Yes/No.	Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
		2.1.5. How effective is the application of logical framework as a management tool during the implementation and any changes in it?	• Yes/No.	• Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review

2.1.6. Does modification of the indicators affect project management? If yes, haw?	• Yes/No.	• Project reporting, national statistics and reporting, interviews, site visits	• UNDP/GEF Monitoring & Evaluation Policies, Project and government
2.1.7. Does the system of monitoring and evaluation contributes to the monitoring of progress in achieving project objectives by means of ongoing collection of data on selected indicators; whether annual reports are complete, precise and contain reasonable ratings; whether the information provided by monitoring and evaluation system is used for project efficiency and adaptation to changing needs.	• Yes/No.	Project reporting, national statistics and reporting, interviews, site visits	reporting/statistics review • UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
2.1.8. Are the risks identified in the draft document and reviews on project implementation are the most crucial and that these risks are given adequate estimate (rating). If not, why?	• Yes/No.	Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
2.1.9. Are there additionally identified risks?	• ATLAS risk log timely fulfilled.	Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
2.1.10. Is the project system of risk identification effective?	• Yes/No	Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review

2.1.11. Is UNDP-GEF risk management system properly used? How can UNDP-GEF risk management system be used for strengthening project management?	• Yes/No.	Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
2.1.12. How effective is work planning? (application of regularly updated work plans, IT for the support of the implementation, participation and monitoring as well as other project activities, etc.).	• Yes/No.	Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
2.1.13. Are the processes of work planning based on outcomes ⁶³ ?	• Yes/No	Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
2.1.14. Is there effective financial management in place? Is the project operating in a cost-effective manner? Is there due diligence in financial management and financial audits?	• Yes/No.	Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
2.1.15. Was the promised co-funding provided?	• Yes/No.	• Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review

⁶³ Documents on risk management are available at http://www.undp.org/eo/methodologies.htm

	2.1.16. Is there an effective reporting, e.g. in relation to the changes in the project and documenting and sharing lessons learned from the processes of adaptive management?	 Project filing system is in place and properly managed. 	• Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
	2.1.17. Where there any delays during project implementation and what the reasons behind those were? Did the delays influence on the attainment of final outcomes and/or project sustainability and if they did, in what way and as a result of what cause- and-effect relationships?	• Notes to file and other required documentation for justification delays and required mitigation actions.	• Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
	2.2.1. How efficient was the financial management of the project, including specific reference to cost- effectiveness of its interventions?	• Extent to which results have been delivered with the least costly resources possible	Project reporting	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
2.2. Efficiency	2.2.2. What was the role of UNDP and National Implementing Agency in meeting the requirements set out in UNDP Programme and Operations Policies and Procedures?	• Extent of influence to ensure meeting the required international standards	Project reporting	UNDP/GEF Monitoring & Evaluation Policies, Project reporting review
	2.2.3. Are the systems for accountability and transparency of project management approach/results and meeting the relevant national norms and standards in place?	• # of national norms and standards met	 Project and national reporting 	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review

2.3.1. Is the project cost-effective? Is the project an • Yes/No. Project reporting, • UNDP/GEF option based on minimal expenses? Were there any national statistics and Monitoring & delays in project implementation and if yes, how reporting, interviews, site Evaluation Policies, does it affect cost-effectiveness? Project and visits government reporting/statistics review 2.3.2. Are the achieved project outcomes • Yes/No Project reporting • UNDP/GEF commensurate with the original or modified project Monitoring & objectives? Evaluation Policies, Project reporting review 2.3. Cost-2.3.3. Whether the project outcomes provided the • Yes/No Project reporting, • UNDP/GEF effectiveness most effective way towards results? national statistics and Monitoring & Evaluation Policies, reporting Project and government reporting/statistics review 2.3.4. What is effectiveness of project awareness • Extent of influence the design and Project reporting, • UNDP/GEF raising and outreach activities/products on construction and public national statistics and Monitoring & promoting energy efficiency in apartment buildings administration practices, including in reporting **Evaluation Policies**, among all project stakeholders sectors other than apartment Project and buildings (e.g. residential and government commercial) reporting/statistics review 2.4.1. What was the role of UNDP and the MEP in • Yes/No • Project reporting, • UNDP/GEF accordance with the requirements ensured by the national statistics and Monitoring & 2.4. Contribution Policies and Procedures of UNDP on programs and **Evaluation Policies**, reporting, interviews of the Executive activities?⁶⁴ (considering: site visits, participation in Project and Agency and the meetings of Project Council, project overviews, government Partner preparation of project implementation reviews (PIR) reporting/statistics and following measures, GEF guidance, Operational review support and "soft" support)

⁶⁴ See <u>http://content.undp.org/go/userguide/results/project/</u>

2.5.1. Did the local parties concerned participate in • Yes/No. Project reporting, • UNDP/GEF project management and decision-making and if national statistics and Monitoring & they do, how they do it? What are the strong and reporting, interviews, site Evaluation Policies, weak sides of the approach taken by the project? Project and visits government reporting/statistics review 2.5.2. Does the project receive consultations and are • Yes/No. • Project reporting, • UNDP/GEF the skills, experience and knowledge of relevant national statistics and Monitoring & authorities, NGOs, public groups, private sector, local reporting, interviews, site **Evaluation Policies**, authorities and academic institutions applied during visits Project and project implementation and evaluation? government 2.5. Participation reporting/statistics of the parties review concerned, 2.5.3. Are the processes of disseminating • Yes/No. Project reporting, • UNDP/GEF partnership information among partners and parties concerned national statistics and Monitoring & strategies has rational mechanisms? reporting, interviews, site **Evaluation Policies**, visits Project and government reporting/statistics review 2.5.4. Are the potential opportunities for • Yes/No. • UNDP/GEF Project reporting, partnerships well utilized? Monitoring & national statistics and Evaluation Policies, reporting, interviews, site Project and visits government reporting/statistics review 2.6.1. Is the project on track of achieving the planned • Yes/No. • Project reporting, • UNDP/GEF 2.6. Progress in outputs? If not, why? national statistics and Monitoring & the achievement reporting, interviews, site **Evaluation Policies**, PROJECT of subvisits Project and deliverables, government reporting/statistics outcome/ m. review

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Outcomes? If not, why?	• Yes/No.	 Project reporting, national statistics and 	UNDP/GEF Monitoring &
		reporting, interviews, site	Evaluation Policies,
		visits	Project and
			government
			reporting/statistics
			review
2.6.3. How adequate is the RoK's relevant laws and	 Number of standards, codes, 	 Project reporting, 	 UNDP/GEF
regulations and measures proposed by the project	regulations, policies, procurement	national statistics and	Monitoring &
on the creation of favourable conditions reduction of	norms, etc.	reporting, interviews, site	Evaluation Policies,
uPOPs and other pollutants emissions?		visits	Project and
			government
			reporting/statistics
			review
2.6.4. How necessity, adequate and effective is the	 Published official documentation 	 Project reporting, 	UNDP/GEF
approval of national standards designed within	(laws, state programs, etc.). Official	national statistics and	Monitoring &
project framework?	statistics and enforcement	reporting, interviews, site	Evaluation Policies,
	documentation.	visits	Project and
			government
			reporting/statistics
			review
2.6.5. Were all received cost-sharing commitments	Cost-sharing agreements.	 Project reporting, 	
from the government and private sector finally materialized into reality?		interviews, site visits	
2.6.6. How adequate and effective are the products	• Evidence of increased awareness of	Web site information,	UNDP/GEF
on awareness-raising in reduction of uPOPs and	public about. Reduction of uPOPs	Project reporting, national	Monitoring &
other pollutants emissions prepared by the project	and other pollutants emissions.	statistics and reporting,	Evaluation Policies,
(website; video clips; promotional materials:		interviews, site visits	Project and
calendars, t-shirts, publications, brochures,			government
notebooks, purses, leaflets, etc.)?			reporting/statistics
			-

2.7.2. Whether national stakeholders participated in Yes/No Project reporting, UNDP/GEF Monitoring & Evaluation Policies, project management and decision-making have government ownership for project outcomes and their further reporting/documentation Project and replication and scaling-up? government documentation review 2.7.3. Was the project sustainability strategy Yes/No Project reporting; national UNDP/GEF Monitoring relevant and efficient? evidences & Evaluation Policies, Project and government documentation review 2.7.4. Are there any environmental risks that may Yes/No pose a threat to the sustainability of the project outcomes? • UNDP/GEF 2.7.5. Whether the risks identified in project • Extent of risk appropriateness • Project reporting, UNDP-• Yes/No **GEF Risk Management** document and PIRs were appropriate and Monitoring & corresponding risk management strategies/systems **Evaluation Policies** System were adopted and implemented? 2.7.6. Whether national stakeholders participated in • Yes/No. • Project reporting, • UNDP/GEF project management and decision-making have government Monitoring & ownership for project outcomes and their further reporting/documentation **Evaluation Policies**, replication and scaling-up? Project and government documentation review 2.7.7. Was the project sustainability strategy • Yes/No. UNDP/GEF Project reporting; relevant and efficient? national evidences Monitoring & **Evaluation Policies**, Project and government documentation review • Yes/No. • UNDP/GEF 2.7.8. Are there any environmental risks that may Project reporting, pose a threat to the sustainability of the project national statistics and Monitoring & outcomes? reporting, interviews, site Evaluation Policies, Project and visits government reporting/statistics review

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	2.7.9. What is the probability that the activities launched within the framework of this project will continue providing benefits for a long time after project completion?	• Yes/No. Project exit strategy consulted with key stakeholders.	 Project reporting, national statistics and reporting, interviews, site visits 	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
	2.7.10. How project benefits will continue within project framework or beyond upon its completion (including state obligations and integration of project objectives into more extensive policies in development field and sectoral plans)?	• # of replicated projects, improved enforcement of legislation, state policy.	 Project reporting, national statistics and reporting, interviews, site visits 	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
	 2.7.11. Financial resources: are there any financial risks that may threaten maintaining project outcomes? Clarification sub-questions: What is the probability that financial and economic resources will not be available upon the end of support from GEF? What are sources of such resources in the state and private sectors, profitable activities and trends pointing out at the possibility of having adequate financial resources for maintaining project outcomes? 	• Yes/No.	• Project reporting, national statistics and reporting, interviews, site visits	• UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review

 2.7.12. Socio political: are there any social or political risks that may threaten maintaining project outcomes? Clarification sub-questions: What is the probability that the level of commitment and responsibility of the parties concerned (including state authorities and other key parties concerned) will be insufficient for maintaining final outcomes/project benefits? Do the various parties concerned realize that it is in their interest that project benefits keep on? Are the community/parties concerned aware about supporting long-term project objectives? 	• Yes/No.	Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
 2.7.13. Institutional frameworks and management: Do statutory regulation, policy, structures and management processes pose risks that may threaten the sustainability of project benefits? Clarification sub-question: Are there required systems for accountability and transparency and the necessary technical know-how? 	• Yes/No.	• Project reporting, national statistics and reporting, interviews, site visits	• UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review
2.7.14. Ecological: Are there any ecological risks that may threaten maintaining project outcomes?	• Yes/No.	 Project reporting, national statistics and reporting, interviews, site visits 	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics review

	2.7.15. Whether there will be certain types of activities threatening sustainability of project outcomes?	• Yes/No.	Project reporting, national statistics and reporting, interviews, site visits	UNDP/GEF Monitoring & Evaluation Policies, Project and government reporting/statistics
				review
Impact: Are the	re indications that the project has contributed to, or enabl	ed progress toward, reduced environme	ntal stress and/or improved ed	cological status?
2.8. Impact	2.8.1. What contribution was made by the established HCW treatment centers in improving the environmental situation in the pilot regions?	uPOPs and other pollutants emissions reduced	Project reporting, government reporting/documentation/s tatistics	UNDP/GEF Monito & Evaluation Polici Project and government documentation re
	2.8.2. How the project did enable reducing pressure on corresponding natural resources (e.g. through reduced use of primary energy sources, and/or use	It is possible to use healthcare wastes as secondary raw materials	Project reporting, government reporting/documentation/s	UNDP/GEF Monito & Evaluation Polic Project and

ANNEX 10: PROJECT LESSONS-LEARNED REPORT 2012-2017

Project Title:	«NIP update, integration of POPs into national planning and promoting sound healthcare waste management in Kazakhstan»
Country:	Kazakhstan
Related CPAP Outcome	National authorities and communities are better prepared and respond to natural and man-made disasters.
	Project Description and Key Lessons-Learned
Brief description of context	The objective of the project is to reduce the releases of unintentionally produced POPs and other globally harmful pollutants into the environment by promoting sound healthcare waste management in Kazakhstan, and to assist the country in implementing its relevant obligations under the Stockholm Convention.
Brief description of project	The main objective of the UNDP / GEF / Government of the Republic of Kazakhstan project is to reduce emissions of unintentionally produced persistent organic pollutants (POPs) and other pollutants harmful to the environment and human health by promoting rational management of medical waste in Kazakhstan and assisting the country in implementing its relevant Obligations under the Stockholm Convention. The project will achieve these objectives by means of three components:

	1) updating the National Implementation Plan of the Stockholm Convention and improving the institutional coordination of the International Environmental Agreements on Chemicals (hereinafter referred to as IEAs); 2) conducting a general assessment of the mercury situation; making recommendations on reducing the use and collection of mercury; 3) minimization of emissions of unintentionally formed persistent organic pollutants (hereinafter - UFPOPs) and mercury from medical devices in trial hospitals through demonstration of safe approaches to medical waste management.
Key project successes	 Amendments have been made to the current legislative and implementing regulations of the Republic of Kazakhstan with regard to stricter requirements for public procurement, the normalization of dioxin and furan emissions in off-gases from POPs destruction facilities, the introduction of best available technologies and the use of non-combustion technologies for neutralizing infected medical waste, as well as the introduction of reporting on medical waste; The National Implementation Plan of the Republic of Kazakhstan for the Stockholm Convention on POPs for
	2015-2028 was updated, approved and submitted to the Secretariat of the Stockholm Convention;3. Inventory of new and old UFPOPs;4. The project team participates in the work on the entry of the Republic of Kazakhstan in the OECD Chemicals
	Committee (hereinafter referred to as "CC"). 5. Two state laboratories have been identified and prepared for accreditation for research on dioxins and furans;
	6. National standards of the Republic of Kazakhstan for determining polychlorinated dibenzodioxins and dibenzofurans in the environment have been developed and approved;
	7. Jointly with United Chemical Company LLP preparatory work is underway to establish a Center for Chemical Safety on the basis of Nazarbayev University;
	8. The Minamata Mercury Convention is included in the Perspective Plan for Concluding International Treaties of the Republic of Kazakhstan for 2017-2019;
	9. The initial Inventory of mercury in the Republic of Kazakhstan has been carried out;
	10. Memorandums have been signed with local executive bodies of pilot territories on the reduction of mercury
	 6. National standards of the Republic of Kazakhstan for determining polychlorinated dibenzodioxins and dibenzofurans in the environment have been developed and approved; 7. Jointly with United Chemical Company LLP preparatory work is underway to establish a Center for Chemical Safety on the basis of Nazarbayev University; 8. The Minamata Mercury Convention is included in the Perspective Plan for Concluding International Treaties of the Republic of Kazakhstan for 2017-2019; 9. The initial Inventory of mercury in the Republic of Kazakhstan has been carried out; 10. Memorandums have been signed with local executive bodies of pilot territories on the reduction of mercury use in medicine, providing for the refusal to further purchase and use mercury-containing clinical thermometers;

	11, 19,000 managery modical thermometers have been replaced with electronic thermometers and actaly dispaced
	11. 16,000 mercury medical mermometers have been replaced with electronic mermometers and safely disposed
	of;
	12. The list of goods subject to extended obligations of producers has been supplemented with mercury-containing
	products (lamps and thermometers);
	13. An application Minamata Initial Assessment for Kazakhstan Project Document, supported by the GEF have
	been prepared;
	14. Regional plans for medical waste management in the East Kazakhstan. Kostanay oblasts and Astana have been
	developed:
	15.3 combustible installations have been replaced with non-combustible ones - autoclayes for neutralizing
	medical waste;
	16. Six Centers have been created using non-burning technologies to neutralize medical waste with the
	procurement of all necessary related appliances and equipment: PPE, weights, shipping containers, needle
	destructors.
	17 Three of the six Centers have had a system for the safe transport of medical waste established in them in
	accordance with the requirements of ADP.
	18.25 cominers and trainings on the management of PODs, medical waste and mercury have been conducted:
	10. The first sing the final agement of POPs, medical waste and mercury have been conducted,
	19. The capacity of more than 1,700 representatives of nospitals and public authorities has been enhanced in regard to
	safe handling of POPs, medical waste and mercury.
	20. An online course on the management of POPs, medical waste and mercury has been developed and posted on of
	Zhasyl Damu JSC portal.
	21. A training seminar on project activities has been held for Asian countries.
Project	1. During the project implementation, it was found out that there is no institutional interaction between
shortcomings and	government agencies on the management of chemicals. The system of reporting on international conventions
solutions	regulating chemicals is not perfect. In this regard, the project has prepared and submitted recommendations for
	institutional interaction on chemicals management issues to the Ministry of Energy. Model Reporting Templates
	for the Basel, Stockholm and Rotterdam Conventions have been developed.
	2. There are already laboratories in the country for determining POPs in the environment, however, due to the
	high cost of equipment, there are no available laboratories accredited to conduct UFPOP analyses. There is no
	methodological basis for POP analysis.

	 3. The project foresees the introduction of facilities for the decontamination of medical waste by means of methods alternative to combustion. At the same time, at the beginning of the project, the disposal of medical waste was allowed only through burning. In this regard, the project initiated and amended the legislation allowing for the use of methods alternative to combustion (autoclaving, microwave ovens) for the disposal of medical waste. 4. Public procurement in the sphere of waste management is carried out through the method of price proposal, which allows rendering this service to not bona fide suppliers who use low-quality equipment. In this regard, with the involvement of the project, amendments that make it possible to tighten the requirements for service providers have been introduced in the Law <i>On Public Procurement</i>.
	The project conducted a number of trainings for procurement administrators, including jointly with the project on energy efficiency. The trainings have led to an increase in the capacity of officials responsible for public procurement in the health system. Trainings have been conducted in the pilot regions with the participation of representatives from all regions of Kazakhstan. Increased awareness of officials responsible for public procurement.
Lessons learned	1. In order to fulfill the obligations under the Stockholm Convention, it is necessary to monitor POPs, as well as UFPOPs in the environment. The analysis of the existing monitoring system of POPs carried out by the project demonstrated the lack of state monitoring of POPs, as well as of accredited laboratories for UFPOPs analysis. Due to the high cost of laboratory equipment, the state agency responsible for conducting state monitoring is currently unable to obtain funding from the RB.
	In regard to this, the project, with the participation of Kazgidromet RSE, carried out work on passive sampling of atmospheric air and soil and conducting analyses for POP content, including UFPOPs in five regions of Atyrau, (East Kazakhstan, Kyzylorda, Kostanay and Pavlodar oblasts). The analysis showed the presence of POPs in the environment, as well as the tendency for their increase over time. Monitoring data have been submitted to the Ministry of Energy to use as a justification for obtaining funds from the republican budget to increase the laboratory analytical capacity of the laboratories of Kazgidromet RSE.
	2. The analysis of the medical waste management system in medical institutions conducted by the project showed that waste segregation is carried out according to the class of hazard without separation by type of waste. At the same

time, the total volume of medical waste is mainly made up of plastic waste. With the proper organization of the collection and neutralization system, these wastes can be used as secondary raw materials.

Taking into account the norms and requirements of the Concept of the Republic of Kazakhstan on transition to a green economy aimed at maximum involvement of waste in secondary raw materials, the project carried out work on organizing and introducing separate collection of plastic waste in medical institutions. Devices for cutting off needles, containers for the safe collection and transportation of sharp waste have been purchased.

Trainings on the issues of separate collection of plastic waste have been conducted for representatives of all medical institutions. Work has been carried out on the interaction of established Centers with enterprises providing services for the reception and processing of plastic waste. The project has prepared model patterns for standard operating procedures in the field of medical waste management that have been sent to the Ministry of Health of the Republic of Kazakhstan for application in work.

3. Neutralization of medical waste in the Republic of Kazakhstan is in a competitive environment and is done mainly through burning. At the same time, after introducing amendments to the legislation allowing for the use of high-temperature methods alternative to combustion, the market for the provision of these services has expanded. There have appeared offers for the introduction of microwave oven technology. In order to avoid additional questions regarding how the project determines the method for neutralizing medical waste, all decisions have been considered at workshops with local executive bodies, as well as at the advisory and technical council.

4. The leaders of the pilot regions who oversee the project have been changed several times during the project implementation. This circumstance in a certain way affected the change in the location of installations. In order to ensure stable work, Memorandums have been concluded between the Ministry of Energy of the Republic of Kazakhstan and the akimats of the pilot regions on the implementation of the project. Installation locations and equipment capacity, as well as the method for neutralizing waste have been identified with the participation of all stakeholders. Protocols have been signed.

5. According to the requirements of the project document and the recommendations of the mid-term evaluation, it is necessary to monitor the use of equipment after the end of the project. Relevant agreements have been concluded with the Centers for the purpose of unimpeded monitoring and control over the use of equipment.

Follow-up Actions	 Further sustainability of the project isensured through amendments to the legislation of the Republic of Kazakhstan regarding the handling of POPs, medical wastes and public procurement. The methodology for the inventory of POPs and UF POPs created in the framework of the project was passed on and posted on the information portal of Zhasyl Damu JSC. This is a good tool for using the project outcomes after the end of the project. The introduction of indicators of Health Care Management Plans into the strategic and policy documents of the pilot areas is a good tool for the project sustainability since these documents plan an annual reduction of these documents is under the control of the Government of the Republic of Kazakhstan. Within the framework of the Project, 18,000 clinical mercury thermometers have been safely disposed of and replaced with electronical ones in all health organizations of the pilot territories. At the same time, the work carried out by the project on the replacement of thermometers showed that at the level of district hospitals the replacement of mercury use in medicine providing for the refusal to further purchase and use mercury-containing clinical thermometers have been signed with the Local Executive Bodies of the pilot territories. In order to continue the work on ratification of the Minamata Convention, the Republic of Kazakhstan project "Initial
	 Assessment of Kazakistan within the framework of the Minamata Convention . 6. The work carried out by the Project with the affiliated company Samruk-Kazyna National Welfare Fund of United Chemical Company LLP on the establishment of the Center for Chemicals Monitoring is the basis for the project's sustainability in the part of the project's work on the improvement of laboratory capacity for POPs. 7. One of the key indicators of project sustainability is the use by training centers and educational institutions of the training programs for the management of POPs, medical waste developed by the project and mercury. 8. The project sustainability will also be achieved through trainers trained by the project from the staff of medical institutions, Kazgidromet RSE and NGOs. 9. The work carried out by the project on the establishment of centers for the neutralization of medical waste through autoclaving as well as extensive awareness-building effort have made it possible to draw the attention of business and local executive authorities to this method. To date, four analogous equipment units have been

installed. This is a good example of the replication of project experience. 10. The Ministry of Energy of the
Republic of Kazakhstan conducts work on Kazakhstan's accession to the Committee on Chemicals of the
Organization for Economic Cooperation and Development (hereinafter referred to as the OECD). The request to
raise the status of Kazakhstan was considered at the 56th Joint Meeting of the Committee on Chemical Safety and
the Working Group on Chemicals, Pesticides and Biotechnologies in May-June 2017 in Paris, France). The scope
of the OECD activities includes the issues of the Stockholm, Rotterdam Conventions, as well as the Minamata
Convention. In this regard, the work of the OECD can be viewed as a continuation of the project's work on the
implementation of international environmental agreements (IEAs).

Project Information		
Award ID:	00071893	
CO Focal Points:	Programme Analyst, Sustainable Development/ Urbanization unit Mr. Rassul Rakhimov, <u>rassul.rakhimov@undp.org</u> , Project Manager, Ms. Nina Gor	
Partners:	. Ministry of Energy	
Project resources:		
Report prepared by:	Project Manager, Ms. Nina Gor	
Date:		

ANNEX 11: STRATEGY FOR PROMOTION OF ENERGY EFFECTIVE LIGHTING IN THE REPUBLIC OF KAZAKHSTAN PROJECT CLOUSEOUT

Component	Outcome		Result	Comments
Component 1:	Outcome 1.1: Developed		- annual monitoring of statistical data and	Special attention is paid to the implementation of the
Policy	and implemented roadmap		integrated assessment of the EE product market,	legislative mandate (the EE law) for the phase-out of
development and	for IL phase-out		correction of the prognosis for coverage and,	incandescent lamps. The MID of the RoK uses project
implementation		2013-2014	based on this, a roadmap for the implementation	reports for planning the directions for the development
			of the LN withdrawal policy has been developed.	of the policy of universal introduction of LED lighting,
			Project reports and proposals are submitted to	the improvement of regulatory documents based on
			the government and accepted. Thus, proposals	minimum EE standards. A successful smooth transition
			on the improvement of energy service services	to EE lighting with adequate product quality assurance
			and the PPP mechanism in the lighting sector	and containment of mercury wastes may be observed.
			have been submitted to the MID of the RoK. The	The legislative mandate is supported by the
			proposals have been processed by the Ministry	development of specific technical regulations for
			and corresponding additions have been made to:	buildings and lighting devices, introduction of energy
			p. 4.4.7	effective lighting products into the government
			Energy Saving - 2020 Programs on EEL (Decree of	procurement mechanism, assistance with the creation
			the Government of the Republic of Kazakhstan,	of regional systems for extracting mercury from spent
			dated August 29, 2013), a new edition of the Law	lamps.
			on EE (2016); Law of the Republic of Kazakhstan	Additions to the EE and PPP legislation increase the
			on PPP, No. 379-V, dated 31.10. 2015	financial and organizational capacity for the
		2014-2016		widespread implementation of LED-based EE projects.
				- Policy support joins forces with other donors (EBRD,
				WB, USAID), other UNDP / GEF projects (NAMA in
				particular) to improve favorable environment for
				access to financing for both producers and consumers,
			- The project took part in the development of	implementation of the Green Economy concept.
			recommendations on amendments to the State	
			Program on the Modernization of Housing and	The use of recommendations in the amendments and
				the implementation of the State Program on the

		Communal Services for 2011 - 2020, submitted to	Modernization of Housing and Communal Services for
		the government	2011-2020 has led to the condominiums changing the
			lighting in the entrance halls, staircases and outside
			buildings to LED lamps and lighting fixtures.
			- Further project sustainability is ensured by the
			implementation of the strategy for the development of
			EEL quality management system: development of
			standards; support of laboratories, creation of a
			regulatory framework.
Outcome 1.2: Developed	2103-2014	- 7 technical standards for the quality of LED	- The technical standards approved by the Ministry
and adopted official		products are developed in accordance with the	came into force in July 2015 and improve
technical standards and		requirements of the Customs Union (CU). The	environmental safety, ensure competitiveness,
certification procedures for		standards are officially accepted by the	product quality and rational use of resources.
quality and performance		Committee for Technical Regulation and	- CTRM (Committee for Technical Regulation and
for EE lighting products		Metrology (CTRM) of the MID of the RK by	Metrology) under the MID of the RoK used the
		decree No. 172-od, dated 01.08. 2014	recommendations of the project on energy-efficient
		Implementation of mechanisms for the	lighting when making amendments to the Program for
		execution of these standards, including the	the Transformation of the System of Technical
		processes for certification, testing and quality	Regulation and Quality Infrastructure.
		control, compliance with the requirements of	The implementation of the quality system is ensured
		the CU is ensured by the project as follows:	by the creation of a network of multifunctional testing
		a) special equipment purchased and transferred	laboratories. Their subsequent accreditation will
		and 5 new testing laboratories for measuring	improve the quality of lighting. Re-equipment of the
		the parameters of EE lamps and lighting fixtures	metrology laboratory of CTRM under the MID of the
		created by the Akimats of Astana and Almaty	RoK will allow verification and certification of lighting
		cities;	devices and enhance the capacities of the Institute of
		b) methods for ensuring the quality of EE	Metrology under the CTRM MID
		lighting products developed on the basis of	
		testing laboratories and transferred to the MID	
	2014-2016	of the RoK and the specialized laboratories	
		themselves;	

		 c) "light standards" equipment purchased and transferred to the laboratories for metrology under the CTRM of the MID of the RoK. Proposals on the introduction of amendments to the Regulations of the Customs Union (On the Requirements for Energy Efficiency of Electric Energy-Consuming Devices) have been prepared, and the standards for the quality of LED products are currently in the stage of adoption at the CU. The proposals are supported by the Government of the Republic of Kazakhstan. 	- The proposals for the Regulations of the Customs Union and the standards for the quality of LED products supported by the Government of the Republic of Kazakhstan are currently in the stage of their acceptance by the Customs Union, the delay in the adoption by the Customs Union is conditioned by the position of Russia and Belarus on the prohibition of incandescent lamps and the use of LED lamps.
Outcome 1.3: Updated relevant mandatory and recommended sections of the national building code on lighting, as well as other normative documents	2013-2014 2013-2016	 Proposals have been made to the existing sanitary regulations, and approved by the government (jointly with Sanitary-Epidemiological Expertise and Monitoring RSE of the Ministry of Health of the Republic of Kazakhstan) namely: Sanitary rules (SR) "Sanitary and epidemiological requirements for educational facilities" (Order of the Minister of National Economy of the RK # 179, dated December 29, 2014). The has project developed proposals on introducing changes to the building regulations of the SR RK 2.04-104-2012 (SNIP as before) regarding general and artificial illumination for internal premises where the most cost-effective lamps should be used. The proposals have been submitted to the government, approved by the CTRM MID, and are currently at the approval 	 The changes in SR, which are at the stage of approval in the Ministry of Justice of the Republic of Kazakhstan are approved by the CTRM MID and assume the use of LED lamps and lighting fixtures in general education institutions, considering the requirements of photobiological safety. CTRM MID RK approved and brought up for discussion building regulations: (SR RK 2.04-104-2012) for general and artificial lighting which require to use the most cost-effective lamps, the light output of which is more than 70 lumens / W, and for LED - More than 90 lumens / W. Updated sanitary standards aid the state authorities with the development of technical specifications and justification of the costs for advanced lighting products, which in turn will help buyers in the choice of lighting with full understanding of costs, long-term performance, and environmental protection.

		stage in the Ministry of Justice of the Republic of Kazakhstan.	An integrated approach to the system of implementing regulations and standards and to the creation of a suitable quality control system applied by the project, characterizes a steady trend of using quality EE lighting products in the Republic of Kazakhstan.
		training equipment has been procured - everything to improve the quality of energy audit, in particular - light audit, this was done in support of the implementation of the law on EE. Methodologies and training equipment have been transferred to 14 Energy Efficiency Centers across Kazakhstan.	- Project sustainability is also ensured by improving the quality of light audit. This approach, including specialized training of energy auditors, allows for the further development and introduction of EE and LED technologies at the system level, since it includes a complex: a developed Program for Energy Efficiency Centers, training of trainers, methodological aids, a textbook intended for educational institutions and training centers.
Output 1.4: Enhanced public procurement processes favoring EE and life-cycle cost criteria	2014-2016	- Proposals have been prepared for minimum EE standards, submitted to the MID of the RoK, which in turn approved them and approved the new requirements ensuring (at least 75 lm / W) light output in the relevant document (Decree of the Minister of IR of the Republic of Kazakhstan No. 407 dated 31.03. 2015).	- In accordance with this decree, it is possible to include only energy-efficient lamps and lighting fixtures in the state procurement tender for fixtures for state institutions. State procurement of incandescent lamps is prohibited (EE Law).
	2016-2017	 The potential of government officials responsible for procurement from municipalities is increased through trainings. Trainings have been conducted across the whole territory of the Republic of Kazakhstan 	The quality of public procurement is improved through training, the problems of improving the quality of public procurement in the field of education, medicine and street lighting are considered, the regulatory documents governing public procurement in modern conditions are demonstrated as well as theoretical and practical aspects of planning public procurement to improve energy saving and energy efficiency.

		- Increased awareness of representatives from the prosecutor's office, inspecting officials involved in public procurement.	Participation of the prosecutor's office representatives made it possible to inform them about the existing standards and recommendations for minimum energy efficiency requirements for use in public procurement. When checking public procurement, they must consider these recommendations and not consider them as a corruption component if these requirements are applied. (The recommendations grant that the equipment at a minimum price may not meet the minimum energy efficiency requirements)
Output 1.5: Established systems for collection, recycling, and storage of Hg-containing lamps	2013-2016	The proposals to Eurasian Customs Union Technical Regulations 037/2016 on hazardous substances have been developed, accepted by Technical Regulation and Metrology Committee of the Ministry for Investments and Development as well as accepted by the Customs Union	 Eurasian Customs Union Technical Regulations 037/2016 "On Limitation of Hazardous Substances Application in Electric and Electronics Equipment" will take effect since 1.03.2018. This mechanism will be used to create a powerful mercury lamp disposal system.
		- The project proposals regarding the mercury lamp disposal have been considered in the "Energy Saving 2020" State Program (taken by the Government Resolution No. 904, dated 29.08.2013 (art. 59, 60, 63, 66), which has been effective for almost two years and then repealed by the Government Resolution No. 434, dated 25.07.2016)	- Prepared proposals added as the amendments to the Environmental Code as well as the MSW regulatory base facilitate the sustainable development of the national mercury lamp collection, storage and disposal system.
		- Recommendations have been prepared for development of the mercury lamp collection, processing and storage system on amendments to the list "Extended Producer Responsibility (EPR)", chapter 41-1 "Environmental Code of the Republic of Kazakhstan" (No. 212-III,	- The project assisted the Government in development of the effective schemes in terms of EPR concept development.

		dated 09.01.2007). Approved by the decree of	
		the Minister of Energy of the Republic of	
		Kazakhstan No. 695 dated 04.12.2015 (effective	
		since 01.01.2016)	
		Then, the following proposals to the List of	
	2015-2016	Products (Goods) Subject to Extended Producer	
		(Importer) Responsibility" were approved by	The program and scheme for mercury lamp collection
		the Ministry of Energy of the Republic of	implemented by the Akimat of Astana with broad
		Kazakhstan and superseded to the List, having	information support facilitated to collect more than
		changed the above decree by the following	1.9 mln lamps. Replication of the mercury lamp
		decree of the Minister of Energy of the Republic	disposal program in two regions and nine regions
		of Kazakhstan No. 555 dated 22 12 2016	scheduled for 2017-2018 evidences on the
			sustainability basics laid of conducted activities and
		A model pilot program has been developed	success of the policy implemented at the different
		which includes the disposed moreury lamp	success of the policy implemented at the different
		which includes the disposed mercury lamp	levels.
		collection methods, together with the Akimat of	Further, an attention should be paid to intrastructure
		Astana	development for mercury lamp disposal.
		In order to share the project lessons and to	
		replicate them, the similar activities were	
		implemented in other regions: together with	
		the Akimats of Aktau and Kyzylorda with 80	
		containers installed.	

Component 2:	Output 2.1: Market	2014-2017	- A discount program for consumers purchasing	The Ministry for Investment and Development is
Market	stimulus to promote EE		the LED products has been developed. The	considering recommendations within the concept of
development for	lighting		program was given to the city Akimats (Almaty,	establishment of a national voluntary certification
EE lighting			Astana, Karaganda, Aktobe) and implemented	system and energy efficiency standards for energy-
			jointly with "Chocolife". The mechanism of	consuming devices, as well as promotion of market
			coupon service provided an opportunity for the	incentives for CFL with some degree of caution, and
			poor to participate in the program, thus the	linking market promo activities, if possible, with
			poor support and promotion of the policy	campaigns to promote the collection of used mercury
			implemented by the Ministry for Investment	lamps, considering the best practices.
			and Development of Kazakhstan have been	
			carried out for promoting EE products in	
			lighting industry.	
			During result assessment, the	
			recommendations have been prepared on the	
			next steps and transferred to the Ministry for	
			Investment and Development, which are	
			currently under consideration. In the future, the	
			discount sales of LED lamps will be held in a	
			number of trade networks of Astana and	
			Almaty (Magnum, Line, etc.)	
			3000 LED lamps have been sold.	
	Output 2.2: Implemented	2015-2017	- In order to determine further actions in the	- For the purposes of sustainability and further support
	labeling program for		context of consumer protection in the purchase	of the implemented EE policy, the UNDP/GEF project
	energy-efficient lighting		of energy-efficient products, besides the	"Energy Efficiency Standards, Certification and Labeling
	products		mandatory labeling expected to be approved by	of Home Appliances and Equipment in Kazakhstan" will
			the Customs Union, the proposals are being	support the Ministry for Investment and Development
			developed to expand the national policy while	in its efforts to implement the provisions of the
			considering the introduction of voluntary	relevant CU Regulations, technical standards, quality
			product labeling, taking into account the	system and energy labeling system for electrical
			parameters such as product quality, energy	engineering industry, taking into account the results of
			efficiency and the possibilities of cost-cutting	this project study and the application of standards.
			and expanding the scope of application -	
			household appliances and industrial equipment.	
			Proposals are submitted to the Ministry for Investment and Development. The proposals will be implemented within the UNDP/GEF project "Energy Efficiency Standards, Certification and Labeling of Household Appliances and Equipment in Kazakhstan", launched in 2017.	
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Component 3: Promotion and educational outreach	Output 3.1: Completed promotional campaigns for EE lighting among the general public.	2013-2017	 ? seminars, round tables, promotional activities and other activities have been arranged to promote EE lighting among the public and the proper handling of used mercury lamps. A web site on EE coverage has been developed, including a plan for transferring it to another organization that will support the site after the completion of the UNDP/GEF project 	 Increasing knowledge among various stakeholders on EE lighting covered 10 regions of Kazakhstan, the activities included training of experts in power engineering and energy audit. The conducted training showed the change in the consumer behavior in the transition to EE lighting, as well as the safe disposal of compact fluorescent lamps.
	Output 3.2: Completed EE lighting promotional campaigns among professionals	2013-2017	? seminars and other events have been co- organized and held to promote EE lighting among construction industry professionals, decision-makers and other professionals, including industrial energy auditors	- The conducted promotional EE campaigns among professionals helped to expand the knowledge base of specialists in the energy field (lighting industry), for example, related to light audit.

Component 4: Demonstration projects	Output 4.1: Completed new demonstration projects	2013-2016	Pilot projects have been selected in accordance with the criteria and taking into account the diversity in the overall project portfolio on the basis of the consensus of the Project Management Committee	Pilot project selection criteria demonstrate: a) the potential for cost-effective spending cuts; b) the potential for large-scale reproduction over the project period; and c) opportunities for capacity building among professionals and administrators in project planning and management.
				The pilot project implementation resulted in technical results on energy saving improved, as well as organizational issues addressed, energy savings monitored, greenhouse gas emission reductions assessed with direct and indirect effects, peculiarities of simulation, behavioral change, motivation, etc. defined together with the stakeholders, In particular, incentive measures were demonstrated in the area of housing and communal services by the condominium to replace existing lighting with LEDs in common areas of buildings.
				- Demonstration projects help to increase technical expertise, as well as to create a technical and financial reputation as a basis for future replication, help overcome barriers to promoting EE lighting and the risk associated with the rejection of new technologies and methods.
	Output 4.2: Replicated other known lighting upgrades.	2013-2017	Based on the analysis of the documentation of previous EE lighting projects and the verification of quantitative results, the selection and implementation of the replication projects has been carried out; monitoring and verification of energy saving and GHG emission reductions achieved within	Pilot projects have been implemented in the fields of education, healthcare, housing, administrative buildings and street lighting, using the experience gained. In general, all pilot projects over a period of 15 years expect a direct effect of energy saving in the amount

	the replication projects, documenting the	of 50 GWh and reducing greenhouse gas emissions by
	results of lessons learned. distribution of	47 thousand tons of CO ₂ .
	results and assistance in the replication.	Communications have established between customers,
	Demonstration projects have been	suppliers and installers during the project
	implemented in the following cities: Aktau,	implementation, and the seminars on information
	Kyzylorda, Fort-Shevchenko, Ust-Kamenogorsk,	sharing have been held afterwards both in soft and in
	Lisakovsk, Uralsk, Almaty, Astana and Satpayev.	hard copies

ANNEX 12: EXTEND OF ACHIEVEMENTS OF END-OF-PROJECT INDICATORS FOR OBJECTIVE AND OUTCOMES OF NIP UPDATE, MEDWASTE AND POPS MAINSTREAMING PROJECT

	Indicator	Baseline	End-of-project target	Evidence
Objective: To reduce the releases of unintentionally produced POPs and other globally harmful pollutants into the environment by promoting sound healthcare waste management in Kazakhstan, and to assist the country in implementing its relevant obligations under the Stockholm convention	Update of the National Implementation Plan (NIP) on Stockholm Convention is prepared and coordination on chemical MEAs is enhanced.	 No inventory on new POPs Fragmented legislation controls NIP not updated Several POPs initiatives are implemented not in a coordinated way 	 Inventory completed and publicly available NIP obligations with inclusion of new POPs reviewed and updated. Updated draft NIP is presented to the Government for review process and endorsement 	The report on the inventory of POPs has been prepared on March 2017 and posted on the website of the subordinate organization of the Ministry of Energy JSC "ZhasylDamu" http://zhasyldamu.kz/images/UNDP1/19-06-17/NO%20SOZ.pdf on June 2017. A database of sources of new POPs and a database of sources of uPOPs have been prepared and provided to ZhasylDamu. Reports on inventory of new POPs and uPOPs, have been prepared. All documents are available on the open information resource www.zhasyldamu.kz In 30 December 2014, the updated NIP of the new POPs was agreed with all stakeholders and approved by Ministry of Energy and submitted to the Secretariat of Convention in April 2015. NIP with uPOPs under Government consideration. Due to the long process of the Government approval the updated NIP with uPOPs will be completed by September 2017.
	Mercury inventory and Reduction plan prepared.	 Stand-alone, site specific mercury contamination remediation programme is in place by the World Bank No other inventories of mercury initiated and completed and human exposure estimated 	 Mercury situation in Kazakhstan assessed Inventory is documented Inter-agency consultations held National capacity to handle recovered mercury is assessed and 	Inventory of mercury in the Republic of Kazakhstan is conducted (1 level according to the UNEP methodology). The country base line was identified in the report "National inventory of mercury emissions in Kazakhstan" It wassent to the Ministry of Energy of the Republic of Kazakhstan in June 2016. Report is posted for open public access on the website of the Ministry of Energy of the Republic of Kazakhstan <u>http://energo.gov.kz/index.php?id=7536</u> and on the project page posted on the website of JSC "ZhassylDamu" <u>http://www.zhasyldamu.kz/ru/proekt-proon/novosti.html?start=12</u> The draft National Plan for Reducing the Use and Collection of Mercury was developed and sent to the Ministry of Energy of the Republic of Kazakhstan in February 2017. According to the Letter of the MoE from 03.04.2017 No. 20-05 / 4086 the activities of the Plan will be integrated into the program and

Indicator	Baseline	End-of-project target	Evidence
	 No mercury use and release standard set No national mercury management plan formulated and approved 	recommendation s for improvement are set forward Draft National Mercury Reduction Plan developed with identified priorities.	strategic documents of the interested state bodies after ratification of Minamata Convention by Republic of Kazakhstan. <u>http://www.zhasyldamu.kz/ru/proekt-proon/novosti.html?limitstart=0</u> Project assisted to prepare amendments that were introduced to the Environmental Code of the Republic of Kazakhstan based on the Law No. 506-V of 28.04.2016 "On Amendments and Additions to Certain Legislative Acts of the Republic of Kazakhstan Concerning the Transition of the Republic of Kazakhstan to the Green Economy" to establish environmental requirements for the management of mercury-containing waste and their life-cycle processes corresponding to the relevant RK standards.
		• Mercury emission standard established.	The requirements of standards in the field of waste are mandatory for execution by individual entrepreneurs and legal entities regardless of the organizational and legal form. Currently, the project of ST RK "Accounting and control of mercury-containing waste" is under consideration and approval by the Ministry of Energy of the Republic of Kazakhstan. It is possibly would be finalized by end 2017. In addition, lamps and medical thermometers are included in the List of products (goods) subject to extended obligations of producers (importers) approved by the order of the Minister of Energy of the Republic of Kazakhstan of December 22, 2016 No. 555
POPs emissions from healthcare waste incineration are reduced through a	 Waste segregation for waste source reduction is not a standard accepted approach in medical facilities 	16.38 g TEQ/a to air, and 0.11 g TEQ/a to bottom ash	The volume of treated waste is 1, 200 tons per year. 16,7 g TEQ/a, in bottom ash - 0,1 g TEQ/a By project midterm evaluation the equipment was in the process of procurement therefore the figures of reduction not available.
demonstration component, and wider replication of results.	 Routine waste incineration without emission controls and risk reduction measures is commonly practiced Low level of practical knowledge and use of non-combustion techniques 		For reducing POPs emissions, six pilot Centers for the disinfection of medical waste using non- combustion technologies have been established, including - replacement of previously operating combustion technologies . The Centers start operating only in April 2017 due to the several issues related to the delays long procurement processes, identification places of installation of equipment by local partners. In 2016, at the expense of the state budget, autoclaves were installed in two medical institutions for neutralizing medical waste. Also, business entities installed two similar facilities (Almaty, Petropavlovsk). Until the end of 2017, the total amount of neutralized waste (on all existing installations) Will be 1,250 kg. That will reduce uPOPs in emissions up to 16.7 g TEQ/a, in bottom ash - 0.1 g TEQ/a.

	Indicator	Baseline	End-of-project target	Evidence
		 Baseline emissions constitute 124.88 g TEQ/a to air, and 0.65 g TEQ/a to bottom ash. 		
	Mercury waste generated by the health sector is managed soundly and future waste is	 Broken thermometers: 236.81 kg/a. 	 In broken thermometers: 200 kg/a. 	18,000 clinical mercury thermometers in some budgetary organizations of the pilot territories were replaced by electronic ones and sent for demercurization, which resulted in the exclusion of the risk of 36 kg of mercury entering the environment.
	minimized			According to the Project Document, at the beginning of the Project implementation the total amount of mercury-containing waste generated from broken clinical thermometers in the healthcare organizations of Kazakhstan is 236.81 kg / year. Within the framework of the Project, 18,000 clinical mercury thermometers were replaced by electronic and safely disposed of in all health organizations of the pilot territories, which prevented the possible release of 36 kg of mercury into the environment. Thus, by the end of the Project, the total amount of mercury-containing waste generated from broken clinical thermometers in healthcare organizations in Kazakhstan is 200 kg / year.
Component 1: St	ockholm Conver	ntion NIP update and	d improved institu	tional coordination on chemical MEAs

	Indicator	Baseline	End-of-project	Evidence
			talget	
Outcome 1.1: POPs inventories improved for informed decision making and priority setting	Capacity building programme (trainings) for involved stakeholders developed and implemented on POPs risks, inventories, POPs tracking, monitoring of data reported by responsible parties.	 Training on PCBs inventory and management is being carried out in the framework of the UNDP PCB project. No training on new POPs is currently planned on POPs issue in Kazakhstan Limited information on new POPs is available 	 Web tool for on line training completed and published; At least three (3) complementary trainings completed; Training effectiveness assessed (with both training feedback from the trainees and final tests) Number of requests for data sent out and processed Number of visits made to related stakeholders 	Online training course is posted on the website of ZhasylDamu JSC in March 2017. Http://zhasyldamu.kz/en/project-proon/programma-soz.html For the purposes of using and distributing materials prepared within the framework of the project, the "Center for Sustainable Development" Company conducted 9 additional trainings with the use of a training program prepared within the framework of the project. All trainings were completed by filling in questionnaires, in which the trainees expressed their opinion. The main part of the participants noted the high efficiency of the training, the importance and relevance of the material presented. Training materials developed, printed and dessiminated Training reports are developed. The total number of requests sent to obtain the data was 405 Total number of visits to enterprises - 15.

National	•Original 2003-	•uPOPs inventory	Based on the results of the inventory on the basis of data received from enterprises, the volume of
information	2005 uPOPs	completed using	μ POPs emissions in Kazakhstan in 2015 amounted to 2 776 g TEO/year. The maximum emissions were
system	inventory	the most recent	received for the category "Heat and electricity production" (2 597 26 g TEQ/year)
(inventory) on	conducted with a	data available	
POPs expanded	limited set of	•POPs inventories	In the course of the documentary inventory of research in the field of pesticides and POPs pesticides,
(undated	industrial sources	undated for	the project identified the discovery of new POPs pesticides in the following regions of Kazakhstan:
information on	and outdated		Akmolinskaya, North Kazakhstan region, East Kazakhstan, Pavlodar, Kyzylorda, Almaty, Atyrau.
	and outdated.	upops and pops	
upops and new	•Inventory of POPS	pesticides,	Most of the obsolete pesticides detected as a result of the inventory are mixtures of unknown
POPS).	pesticides	covering all the	composition (72.0% of the total number) that need identification. The report is posted on the website
	stockpiles and	territory of	of JSC "ZhasylDamu" http://zhasyldamu.kz/images/UNDP1/19-06-17/SOZ-PES.pdf
	burial sites limited	Kazakhstan.	
	to 20% of the	 Industrial use of 	The types of industrial use of new POPs have been assessed from March 2016 to April 2017 and
	country at the NIP	new POPs	summarized, possible areas of application of specific new POPs have been identified at Kazakhstan
	stage.	identified and	enterprises, and alternatives to potentially used new POPs have been identified, both among chemicals
	 Under the sectoral 	possible chemical	and among non-chemical materials. The report is posted on the website of ZhassylDamu JSC.
	programs "Zhasyl	and non-chemical	Http://zhasyldamu.kz/images/UNDP1/19-06-17/Ocenka%20SOZ.pdf
	Damu (Green	alternatives	
	Growth) for 2010-	assessed.	In the course of the documentary inventory of research in the field of pesticides and POPs pesticides,
	2014", adopted by	 Inventory of 	the project identified the discovery of new POPs pesticides in the following regions of Kazakhstan:
	the Government of	stockpiles and	Akmolinskaya, North Kazakhstan region, East Kazakhstan, Pavlodar, Kyzylorda, Almaty, Atyrau.
	the Republic of	burial sites of	A Plan to continue the inventory of unintentionally formed persistent organic pollutants and new POPs
	Kazakhstan dated	pesticides	pesticides, as well as other POPs included in the Stockholm Convention list, has been preparedin April
	September 10, 2010	covering at least	2017 and submitted to MoE.
	# 924, a detailed	70% of the	
	inventory of all	country.	The methodology for inventory of POPs-pesticides, industrial POPs and uPOPs, the results of the
	POPs and obsolete	•Plan for	inventory of these POPs, as well as proposals for the continued inventory of POPs in Kazakhstan were
	pesticides is	maintaining and	provided. <u>Http://zhasyldamu.kz/images/UNDP1/19-06-17/NO%20SOZ.pdf</u> in June 2017.
	envisaged but not	completing the	
	started vet	above inventories	A database of sources of new POPs and a database of sources of uPOPs have been prepared by Project
	started yet.	elaborated and	and provided to ZhasylDamu. Reports on inventory of new POPs and uPOPs, have been prepared. All
		institutional	documents are available on the open information resource www.zhasyldamu.kz
		rosponsibilitios	
		responsionities	
		assigned.	
		•An information	
		system on	
		inventories of	

	POPs substances	
	established	

target	
Outcome 1.2: National capacities on POPs monitoring, analytical capabilities are assessed Studies on existing POPs analytical and monitoring capabilities for the whole range of POPs (with focus on new POPs) carried out • A few laboratories identified in the course of NIP preparation and GEF/UNDP PCB management programme. • National POPs monitoring plan approved as part of relevant national policies and documents. Reports on laboratory assessment was developed. • National capabilities are assessed • Studies on existing POPs analytical capabilities for the whole range of POPs (with focus on new POPs) carried out • A few laboratories identified in the course of NIP preparation and GEF/UNDP PCB management programme. • Proposals have been prepared for making additions to the monitoring development national policies and documents. • Porticipation in regional out • Participation in regional monitoring nationally accredited for PCB analyses • Draft POPs national monitoring plan developed by RECETOX – a Stockholm Convention's Regional Centre in • National POPs monitoring networks is not possible due to the lack of accredited laboratories equipped for POP contended pesticides.	program. The or further inclusion hile approving its toring of POPs in mal monitoring analysis. Currently of laboratories for

	Indicator	Baseline	End-of-project target	Evidence
	A set of recommendatio ns for the improvement of such capabilities formulated and submitted to the Government	 No full range of POPs and POPs in goods/environment is handled by existing laboratories No national consultations held on priorities No action plan is in place for improvements 	•At least two (2) laboratories accredited to perform uPOPs analysis in goods/environme nt;	Two laboratories for accreditation were identified -East-Kazakhstan and North-Kazakhstan branches of the RSE "Kazhydromet". Recommendations for accreditation of laboratories have been prepared. Due to the fact that at present the expansion of the field of laboratory accreditation for dioxins and furans is not possible due to the lack of expensive highly sensitive equipment, the laboratory of East Kazakhstan has carried out activities to prepare the accreditation of the laboratory for other POPs- POPs pesticides (Alfa-HCCH , 4,4-DDE, 4,4-DDD, 4,4-DDT), the analysis of which is possible on the available equipment. Jointly with branch of Samruk Kazyna the United Chemical Company LLP, negotiations are underway to establish a Center for Chemical Safety on the basis of Nazarbayev University, which includes funding for the identification of the entire spectrum of POPs and uPOPs. On request of LLP "United Chemical Company", a technical specification for the laboratory equipment of this Center was developed by Project. By September 2017, it is expected that LLP "United Chemical Company", would purchase laboratory equipment with subsequent accreditation.
Outcome 1.3: Policy, institutional frameworks and enabling regulatory environment are in place to ensure better control on POPs accumulation and emissions	Institutional coordination and compliance with international agreements improved through firmer institutionalizati on of POPs issues into national structures	 No POPs coordination center in existence due to lengthy Government's approval procedures and unaligned MEP mandate, and mismatch of proposed workplans (to 2028) with 3 year long financial planning processes 	 POPs group meets regularly to guide the NIP update process Institutionaliza tion of new POPs issues into relevant line ministries ensured according to defined roles. Coordination mechanisms on POPs issues institutionalized 	To manage the process of updating the NIP, meetings with government bodies were held on a regular basis. It was conducted 7 meetings on high level. The analysis was carried out of existing mechanisms of inter-sectoral coordination of POPs management issues and legislation in the field of POPs management and wastes containing them, which resulted in proposals on improving the regulatory framework and mechanism for cross-sectoral coordination of POPs management issues. For each ministry and agency that is a participant in the coordination mechanism on POPs, terms of references were developed. The report with analysis was presented MoE in July 2017. Proposals have been prepared on the creation of a coordination mechanism on persistent organic pollutants in the Republic of Kazakhstan, including terms of references for the authorized bodies of the Republic of Kazakhstan and proposals for financing, sent to the Ministry of Energy of the Republic of Kazakhstan

Indicator	Baseline	End-of-project target	Evidence
	 POPs coordination happens in a fragmented manner with no alignment of roles Nu funding sources to sustain POPs coordination function are available 	 and embedded into draft regulations sent for Government's review and approval. Funding sources to ensure the mechanism's sustainability are defined, consulted on with MoF, and proposed for inclusion in national planning 	 Work is underway to establish the National Coordinating Center of the Republic of Kazakhstan on Persistent Organic Pollutants (hereinafter referred to as the POPs NCC), based on JSC Zhasyl Damu. Draft requirements and estimation of expenses for the National Coordination center creation was presented to Zhasyl Damu. Project took part in the draft preparation. Currently the draft proposal on the establishment of the POPs NCC at the stage of consideration and approval Creation of NCC was conciliated with governmental bodies in September 2016. Financing of the national coordination mechanism will be carried out by the republican budget programs. Budget programs for financing the coordination mechanism should be developed and approved in accordance with the Budget Code of the Republic of Kazakhstan according to the existed rules and regulations for the development and approval of national budget programs
 National legal framework, by aligning institutional roles, reviewed and improved to include the issue of insofar unaddressed POPs, uPOPs and new POPs 	 Ecological Code contains only general information on POPs management (chapter 40 on dangerous chemicals), with amendments related to PCBs supported by GEF/UNDP programme on PCBs The Government has plans to extend the provisions of chapter 40 to 	 Final report on the improvement of current regulatory system for including the issues of insofar unaddressed POPs, uPOPs and new POPs. Amended regulation drafted and submitted. 	Project provided report with proposals on improvement current regulatory system The order of the Minister of Energy on the "Rules for handling persistent organic pollutants" will be amended based on the report. Apart from updating the sections, the new two sections on the inventory of unintentionally formed POPs has been introduced. It is included step-by-step instructions and reporting form for enterprises to conduct a uPOP inventory. Now, the Rules are going through the procedure established by the legislation for coordination with stakeholders. After the completion of this procedure, the Rules for handling POPs and the waste containing them will take effect.

Indicator	Baseline	End-of-project target	Evidence
Sectoral technical guidelines updated to include the issue of priority POPs, including	regulate emissions uPOPs • MEP plans measures to improve the operational control of industrial emissions, including burning of fuels, and promote the construction and modernization of facilities for cleaning exhaust gases in the steel industry. • Guidelines and action plans are being drafted on the sectors related to POPs waste and PCBs, under the UNDP PCB project	 Technical guidelines and action plans on POPs are submitted for approval by relevant state 	The technical documents are developed and approved by the Order of the Committee for Technical Regulation and Metrology of the Ministry of Investment and Development of the Republic of Kazakhstan dated 26.11.2016 No. 270.Methods for determination of PCBD/F in environment objects (soil, water, air) are approved in the form of following National Standards of the Republic of Kazakhstan: ST RK 2813- 2016 "Drinking, surface natural and sewage water. Determination of mass concentrations of polychlorinated dibenzodioxins and dibenzofurans ",
sampling and analysis methods	under Zhasyl Damu (Green Growth) initiative.	bodies.	ST RK 2814-2016" Atmospheric air. Determination of mass concentrations of polychlorinated dibenzodioxins and dibenzofurans ", ST RK 2815-2016" Soils and solid industrial wastes. Determination of mass concentrations of polychlorinated dibenzodioxins and dibenzofurans ".
Capacity building programme (trainings) and consultations for involved	 No national training held on new POPs, developments in the Stockholm Convention and NIP update guidelines; 	 At least, two (2) complementary workshops held Sixty (60) stakeholders 	The Center for Sustainable Development conducted an additional 9 workshops on the handling of POPs

	Indicator	Baseline	End-of-project	Evidence
			taiget	
	stakeholders developed and implemented on POPs related risks, POPs monitoring, institutional roles and responsibilities, POPs control legislation benchmarks and enforcement	 Currently prevailing insufficient knowledge on new POPs, their risks and control measures and approaches 	participated in workshops • Results of stakeholder consultations • NIP update formulated	More than 150 stakeholders took part in these workshops The result of consultations was the raising of awareness, as well as the possibility of taking decisions on POPs and other chemicals. New project Proposal on 2nd stage of Mercury Inventory (Minamata Convention) was approved bt GEF. The NIP was updated with respect to new POPs, uPOPs, pesticides containing new POPs. In 30 December 2014, the updated NIP of the new POPs was agreed with all stakeholders and approved by Ministry of Energy and submitted to the Secretariat of Convention
	National Implementation Plan (NIP) on Stockholm Convention obligations with inclusion of new POPs reviewed and updated, with elaboration of specific action plans on new POPs.	• The Government is carrying out several non- coordinated actions on POPs (update of inventories on pesticidal POPs in 5 regions, PCB management, inventory and partial disposal, planning better control of uPOPs, improving of existing regulations).	 Final draft of the NIP completed and circulated for review within the main stakeholders. Updated NIP submitted for approval to the Government, approved and submitted to the Secretariat. 	From 2015 to 2017 the project was working on uPOP and updated NIP was presented to Ministry of Energy and it is currently on the Government site for discussion and feedback by stakeholders. In accordance with the current legislation, the draft is posted on the portal of state services of the Ministry of Energy of the Republic of Kazakhstan on <u>https://legalacts.egov.kz/list?governmentId=940</u> In 30 December 2014, the updated NIP of the new POPs was agreed with all stakeholders and approved by Ministry of Energy and submitted to the Secretariat of Convention in April 2015. NIP with uPOPs under Government consideration. Due to the long process of the Government approval the updated NIP with uPOPs will be completed by September 2017. It is planned before the end of the project activity
Outcome 1.4: Improved institutional	Review and better alignment of ministerial	 No or very fragmented institutional structure 	 Roadmap in place for joint coordination of MEAs 	The Action Roadmap for the implementation of the Stockholm, Rotterdam and Basel Conventions was prepared and submitted to the Ministry of Energy of the Republic of Kazakhstan in July 2017.

	Indicator	Baseline	End-of-project target	Evidence
			uiget	
coordination on chemical MEAs	functions on implementation of Conventions' obligations	overseeing chemicals MEAs • Lack of common knowledge on synergies between chemical MEAs	• Draft regulation to enforce selected recommendation s is in place	The Law of the Republic of Kazakhstan dated 28.04.2016 No. 506-V LRK "On Amendments and Additions to Some Legislative Acts on the Issues of Green Economy" amended the Environmental Code, establishing requirements on the need to destroy POPs in an environmentally sound manner. In addition, the norm of the maintenance of dioxins and furans in waste gases in concentration not higher than 0.1 ng/m 3 is established. The project team was part of the working group on introducing changes.
	Establishment of coordination mechanisms to support synergistic implementation	 No conceptual understanding (strategy) on the synergism and collaborative operation of 	•Draft legislation supporting establishment of the coordinating mechanism submitted for	Together with JSC "ZhasylDamu", work is underway to establish the National Coordination Center of the Republic of Kazakhstan on persistent organic pollutants (hereinafter - POPs NCC). The Draft Resolution of the Government of the Republic of Kazakhstan on the establishment of the POPs NCC is under the approval stage.
	of Stockholm, Rotterdam and Basel Conventions and established framework (system) for	 responsible parties No or very fragmented institutional structure overseeing chemicals MEAs and fi Gove 	review and approval •Temporary (with GEF/UNDP project's help) and fixed (Government)	Financing of the coordination mechanism can be carried out at the expense of the republican budget programs. Budget programs for financing the coordination mechanism are developed and approved in accordance with the Budget Code of the Republic of Kazakhstan and the Rules for the development and approval (reaffirmation) of budget programs (subprograms) and the requirements for their content approved by the Order of the Minister of National Economy of the Republic of Kazakhstan of December 30, 2014 No. 195
	monitoring, accountancy and reporting on the implementation of the Stockholm, Basel and Rotterdam	coordination mechanism established for synergistic implementation of MEAs • No TOR and mandate of the mechanism is in	budgets for operation of the MEA mechanism defined and proposal for financing submitted to MoF •Monitoring system forms part	The issues of monitoring the implementation of MEA obligations are included in the proposals on the institutional structure of state bodies and organizations responsible for the implementation of the three conventions prepared by the draft and submitted to the Ministry of Energy of the Republic of Kazakhstan in July 2017.
	conventions in Kazakhstan	existence No formal central monitoring on reporting obligations is 	of the prepared draft legislation on the MEA	The Action Roadmap for the implementation of the Stockholm, Rotterdam and Basel Conventions was prepared and submitted to the Ministry of Energy of the Republic of Kazakhstan in July 2017. The regulations on the National Coordination Center have been developed.

	Indicator	Baseline	End-of-project target	Evidence
		maintained to assess quality of MEA implementation • Data collection challenges to ensure better	coordinating mechanism •Draft strategic concept and action plan are in place	
	Capacity of government authorities on implementation of chemical conventions improved Improved data collection and chemical review processes for decision making and control improvements on the import and use of new dangerous chemical substances	reporting Lack of legal framework for cooperation among key stakeholders •No previous training on synergies and MEA implementation held •Data collection challenges to ensure better reporting •No conceptual understanding (strategy) on the synergism and collaborative operation of	 Draft legislation supporting establishment of the coordinating mechanism submitted for review and approval Received capacity is applied in decision-making forums 	 The draft resolution on the establishment of the Coordination center (focal point) was agreed with all stakeholders and submitted to the Government for a final decision During the project implementation period, 5 workshops were held, focusing on the synergies of MEAs on chemicals The project assisted in creating the institutional structure of state bodies and organizations responsible for the implementation of the three conventions through the preparation of proposals for its creation and submission to the Ministry of Energy of the Republic of Kazakhstan in July 2017. Long-term plans for the provision of national reports and proposals for changing statistical and industrial reporting systems, as well as requirements for model national reports, were prepared and submitted to the Ministry of Energy of the Republic of Kazakhstan in July 2017.
		responsible parties • •No action plan in place to support operation of the MEA coordinating mechanism		Proposals on the organization of the information and education system of the population and cooperation with NGOs on the implementation of the three conventions were prepared and submitted to the Ministry of Energy of the Republic of Kazakhstan in July 2017.
Component 2:	Overall mercur	y situation assesse	d and initial mer	cury reduction and containment plan formulated

	Indicator	Baseline	End-of-project target	Evidence
		L		
Outcome 2.1: Mercury assessment implemented, national consultations held to identify priorities for actions and capacity building on mercury risks carried out	e 2.1:Capacity building programme (trainings) for involved I ations identify es for and y building cury risks out• No previous larger scale efforts applied to build capacity of related stakeholders developed and implemented on mercury risks, inventories, sources, data tracking• No previous larger scale efforts applied to build capacity of related stakeholders on mercury negotiations, mercury convention, mercury associated risks etc• No previous larger scale efforts applied to build compactive of related stakeholders 	 Capacity building program (trainings) for involved stakeholders completed. 	An on-line course on the handling of mercury is posted on the website of ZhasylDamu JSC, on the Project page (http://www.zhasyldamu.kz/ru/proekt-proon/programa-po-problemam-rtuti.html) in March 2017	
	Mercury situation in Kazakhstan assessed in coordinated manner jointly with UNEP	 No national mercury assessment made, except in form of waste product No database on sources and mercury releases is in existence No full understanding of scale impact on human health 	 Assessment of country's mercury sources, releases, contaminated sites and priority areas for mercury control completed The country's baseline data is established. Information made available 	 Inventory of mercury in the Republic of Kazakhstan is conducted (1 level according to the UNEP methodology). The country base line was identified in the report "National inventory of mercury emissions in Kazakhstan" It was sent to the Ministry of Energy of the Republic of Kazakhstan in June 2016. The inventory was conducted for 2014. The baseline (2014) of mercury releases to the environment in the RK was 577 tons. This figure will be adjusted during the detailed inventory (2 level according to the UNEP methodology) of the new UNDP-GEF Project "Minamata Initial Assessment for Kazakhstan" Report is posted for open public access on the website of the Ministry of Energy of the Republic of Kazakhstan <u>http://energo.gov.kz/index.php?id=7536</u> and on the project page posted on the website of JSC "ZhassylDamu" <u>http://www.zhasyldamu.kz/ru/proekt-proon/novosti.html?start=12</u>

Indicator	Baseline	End-of-project target	Evidence
		through database and open access web-site	
Outline of National mercury reduction plan developed	 No national mercury assessment made, except in form of waste product No mercury action plan in place outlining priority action and setting budgetary allocations 	 Required data collected and analysed, and discussed in stakeholder forums Priorities identified and agreed with stakeholders Draft National Mercury Reduction plan is formally reviewed and cleared by relevant line Ministries and submitted for final approval. 	Seminars have been held with stakeholders on mercury and its inventory. During the project implementation period, the issues of handling mercury, mercury, the provisions of the Minamata Convention and the results of the inventory of mercury in Kazakhstan were discussed and discussed at 35 seminars and trainings. The national capacity for handling collected mercury has been assessed; recommendations made for improvement. The corresponding Report has been sent to the Ministry of Energy for application in work. The Minamata Mercury Convention is included in the Perspective Plan for Concluding International Agreements of the Republic of Kazakhstan for 2017-2019. It is coordinated with 7 interested state bodies. There are remarks by the Ministry of Justice of the Republic of Kazakhstan, which will be developed in the framework of the UNDP-GEF project "Minamata Initia IAssessment for Kazakhstan" The draft National Plan for Reducing the Use and Collection of Mercury was developed and sent to the Ministry of Energy of the Republic of Kazakhstan in February 2017. According to the Letter of the MoE from 03.04.2017 No. 20-05 / 4086 the activities of the Plan will be integrated into the program and strategic documents of the interested state bodies after ratification of Minamata Convention by Republic of Kazakhstan. http://www.zhasyldamu.kz/ru/proekt-proon/novosti.html?limitstart=0
Public awareness raising campaigns on mercury risks conducted	• Low awareness of sources of mercury in consumer goods and consequences of their improper disposal.	 Remaining 50% of activities designed in the awareness campaign accomplished 	Workshops held on capacity building in mercury hazard for the environment and public health (9 during the reporting period, awareness of 310 people increased, since the beginning of the project, the capacity of about 1500 people has been increased) In polyclinic organizations of the pilot territories (60 polyclinics) posters about the dangers of mercury and mercury-free alternatives are placed. Brochures on the dangers of mercury have been published and distributed

	Indicator	Baseline	End-of-project target	Evidence
Component 3:	Minimization o	f unintentional PO	Ps and mercury	A campaign was held to raise public awareness about the possible negative consequences of using mercury clinical thermometers and ways of solving them, and to minimize their use in 14 pre-school and school education organizations in Astana by replacing them with alternative ones (electronic thermometers).
Management a	pproaches		•	
Outcome 3.1: Sound health- care waste management through uPOPs and mercury reduction approaches are demonstrated in 2-3 regions of the country	Review of national policies and update of HCWM regulatory framework and road map	 No comprehensive conceptual note on improving HCWM policies is in existence No currently established emission standard for waste incineration (POPs, heavy metals). No legal provisions exist, except minimum temperature standard for healthcare waste incineration. No technical standards set for hazardous healthcare waste treatment, including non- combustion methods. 	 Legislative improvements (through amendments in the EcoCode) are submitted for final approval by the Government. Technical standard for hazardous healthcare waste treatment, including non- combustion methods, is established in close consultations and forms a part of legislative improvements Public procurement rules are amended and 	The Environmental Code of the RK does not regulate the management of medical waste. Corresponding changes have been made to the sectoral normative legal acts. Amendments introduced to the sanitary-epidemiological rules approved by the order of the acting Minister of National Economy of the RK of May 24, 2015, № 127, in the part of the use of non-incineration methods for disinfecting medical waste By the Law of the Republic of Kazakhstan as of 04.12.2015, No. 344-V, the Law "On Public Procurement" p.4.st.37, which amended the requirements for the tightening of the competition for the provision of services, including when handling medical waste. Three trainings were conducted, including for healthcare workers in all regions of the Republic of Kazakhstan (16 regions in total) involved in organizing public procurement.

Indicator	Baseline	End-of-project target	Evidence
	 No current requirements defined for waste management plans and country budget does not consider non-incineration technologies for wider replication. Public procurement rules do not include provisions on EPP (procured products can still contain heavy metals and other harmful substances), and the lowest price criterion is the main foundation. Reporting systems (on waste amounts, tracking and monitoring) are underdeveloped 	EPP criteria are set • Awareness raising workshops and media reports (at least, 3 complementary workshops for medical and private sectors, and 10 media reports) • National reporting to POPs convention improved	The requirements for reporting the treatment of medical waste in the framework of the State Cadastre of Hazardous Waste are included in the draft edition of the new sanitary regulations "Sanitary and epidemiological requirements for health facilities". The rules will be approved in December 2017.
 Development of Regional HCWM Management Plan in selected provinces 	 Baseline situation indicates no concerted action with adherence to BAT/BEP in medical sector Sector is fragmented with 	 The Management Plan is adopted, and further actions and investments scheduled Roadmap to support its 	Regional Health Management Plans in the all three pilot regions are adopted. The provisions of the draft Regional Health Management Plans are included in the following program documents of the pilot territories: - in Astana: in the draft "Regional program on waste management until 2020", which includes a separate section on the management of medical waste in the capital city. This document includes an analysis of the current situation on the management of all types of waste, the development of optimal

Indicator	Baseline	End-of-project target	Evidence
	disorganized players with no systemic approach to resolving uPOPs, mercury issues and inappropriate HCWM practices • No specifically tailored action plan exists, and quality data is missing. • No previous capacity building and demonstration of BAT/BEP to reduce uPOPs and mercury releases implemented	implementation is approved by participating stakeholders	 mechanisms for safe collection and transport of waste, and the introduction of advanced technologies for waste management; - in Kostanay Oblast: in the Development Program of the Kostanai Region Territory for 2016-2020 includes an analysis of the situation on the management of medical waste in the region, target indicators have been defined; - in East Kazakhstan Oblast: Deputy Akim of the Oblast approved a regional plan of measures for the safe handling of medical waste in the EKO, including a brief analysis of the situation on the management of medical waste and measures for safe handling
Pilot HCWM projects in selected hospitals, including phase- out of mercury containing thermometers	 No target hospitals for pilots defined before baseline assessment. Waste minimization and segregation at source not practiced No alternative (non-mercury) thermometers and alternative product substitution demonstrated No model facilities (with 	 BAT/BEP (uPOPs and mercury reduction) policies are implemented and targets recorded. Mercury thermometers are replaced by electronic devices, with resulting mercury waste safely handled Health facilities dispose IHCW in 	 Within the scope of the Project activity, the Law of the Republic of Kazakhstan of 25.04.2016 No. 505-V ZRK "On Amendments and Additions to Certain Legislative Acts of the Republic of Kazakhstan on Ecology and Subsoil Use" in paragraph 2 of Article 79 of the Environmental Code of the Republic of Kazakhstan introduced amendments to the admissibility of the use of BAT, Included in the directories of the European Bureau for Integrated Control and Prevention of Environmental Pollution Within the framework of the Project, 18,000 clinical mercury thermometers have been electronically and safely disposed of in all health organizations of the pilot territories, which prevented the possible release of 36 kg of mercury into the environment. The collected mercury thermometers are aimed at demercurization to a specialized enterprise (Almaty). The commissioning and opening of the Centers for the Management of Medical Waste took place in March 2017. Currently, the Centers are not being loaded at full capacity, due to the project, the Centers will begin to operate at full capacity. The volume of treated waste will be 1, 200 tons per year

Indicato	r Baseline	End-of-project	Evidence
		target	
	individual action plans) pilot sustainable BAT/BEP and reduction in waste generation and uPOPs/mercury releases • BAT/BEP are not up taken on a larger scale • Overall waste management system is weak	non-combustion installation. • Evaluation and documentation of practical results (inclusive of waste amounts minimized, uPOPs/mercury releases reduced) in conjunction with Outcome 4	 According to the reports of the Medical Waste Disposal Centers, the volume of treated waste will be at least 1,200 tons / year. According to the de-mercuration certificates for 18,000 mercury thermometers, the amount of mercury released into the environment is reduced by 36 kg.
Establishme of HCW treatment centres in selected site	 Overall waste management system is weak Health facilities have no access to organised waste treatment system or the waste is incinerated in installations not fulfilling BEP/BAT criteria. No non- incineration technologies procured and adopted to support new management system in selected 	 HCW treatment centres successfully operate at preliminary planned capacity (950 tpa). Pricing policies implemented at target groups of stakeholders and service providers Applicable recommendation s on possible pricing criteria proposed for legislative 	 7 Centers for disinfecting medical waste with the use of non-combustion technologies, incl. 3 - in place of previously operating combustion technologies. The autoclave's power is about 90 kg / h (with an average waste density of 120 kg / m3) (autoclave with a 750 l chamber) and about 30 kg / h (autoclave with a 250 l chamber). With an 8-hour working day, the total capacity will be: (6 autoclaves * 90kg * 8 hours * 270 days per year) + (3 * 30 * 8 * 270) = 1 360 000 kg / year or 1,360 tons / year. About 13,5 thousand beds were covered The work of these centers will allow to neutralize and reuse about 1.2 tons of infected medical waste. The project prepared recommendations on pricing issues and conducted relevant trainings with interested parties. The recommendations were presented in March 2017.
	technologies procured and adopted to support new management system in selected regions • Waste disposal	recommendation s on possible pricing criteria proposed for legislative amendments • Waste	The recommendations were presented in March 2017.

	Indicator	Baseline	End-of-project target	Evidence
		of waste in peripheral areas (away from municipal or capital centers) is disadvantaged due to high price • Low quality of service provision results in additional sanitary risks	amounts and uPOPs reductions are measured and reported	The commissioning and opening of the Centres for the Management of Medical Waste took place in March 2017. Currently, the Centres are not being loaded at full capacity, due to the process of participating in competitions and concluding contracts. Before the completion of the project, the Centres will begin to operate at full capacity. The volume of treated waste will be 1, 250 tons per year. The volume of uPOPs in emissions will be decreased to 16.7 g TEQ/a, in bottom ash - g TEQ/a
Outcome 3.2: Linkages between sound HCWM practices and minimization of uPOPs and mercury demonstrated through training and awareness raising programmes	Development and dissemination of BAT/BEP technical guidelines and general awareness raising	 No technical BAT/BEP guidelines in line with international benchmarks (SC, BC) for uPOPs/mercury release reduction and HCW management in place No guidance materials for data collection and 	 Technical guidelines approved and printed (legislative support to back guidelines proposed) Hospitals receive materials for application in daily work Project team participates in 	The Environmental Code of the RK was amended based on the Law of the Republic of Kazakhstan dated 25.04.2016 No. 505-V "On Amendments and Additions to Certain Legislative Acts of the Republic of Kazakhstan on Ecology and Subsoil Use" and now contains additions regarding the admissibility of the application of the best available technologies from the directories of the European Bureau for Integrated Control and Prevention Pollution of the environment. This will make it possible at the legislative level to use the available and recommended BAT/BEP in the field of medical waste management. The project prepared standard drafts of standard operating procedures in the field of medical waste management and sent it to the Ministry of Health of the RK for use in August 2017.
		processing • Hospitals do not have guidance materials in support of trainings and daily safe practices • General awareness on uPOPs/mercury and management is limited	scientific medical conferences (at least, 2), public campaigns (media reports, at least 5, interviews, at least, 3), Zhasyl Damu programme	To raise awareness about the project's activities and to interact with other countries on the management of chemicals and hazardous wastes, project representatives participated in the Final Conference on the UNEP-GEF Project "Pilot Project on the Cadastre of Mercury Pollution of the Environment in the Russian Federation" Moscow.

Indicator	Baseline	End-of-project	Evidence
		taiget	
		discussions and roundtables • National curricula updated	 took part in the scientific and practical conference "Technologies of Urban Sustainability", conducted within the framework of the "Sustainable Cities of Low-Carbon Development" Project. The topic "Management of urban wastes as a contribution to sustainable urban development" is highlighted, providing for a policy of separate collection and recycling of waste. For discussing the monitoring of persistent organic pollutants in the environment and increasing the capacity of the laboratories of regional branches of the RSE "Kazhydromet", a round table was held at RSE "Kazhydromet". To enhance interaction between UNDP, WHO, UNEP the Project conducted a workshop in Astana, named "Mercury. Minamata Convention on Mercury "on the impact of mercury on the environment and public health".
			For the purpose of interaction between state authorities, industrial enterprises and NGOs on the inventory of mercury in the Republic of Kazakhstan and the exchange of experience with the Russian Federation on this issue, a training workshop on "Legislative and institutional framework for the management of persistent organic pollutants and mercury. Inventory of persistent organic pollutants and mercury" was held in Astana.
			For the purpose of improving the educational process in terms of handling medical waste, the program of the training module developed by the project is presented to medical schools. In April 2017 the responses were received on the inclusion of this Program in the curricula of medical schools.
Development of national training programs on uPOPs/mercury risks and sound HCWM,	 Currently, no HCW management training program exists as established by MPH No manuals specifying details of waste management 	 Training carried in two demonstration regions for major health facilities, regional administration, and waste 	For raising awareness on the issues of handling medical waste, organizing and conducting public procurement for medical waste management services, training sessions were held in three pilot regions with the participation of representatives of medical institutions of all district hospitals (the total number of participants was 150)

	Indicator	Baseline	End-of-project target	Evidence
	partnership with stakeholders and national replication of BAT/BEP demonstration	in a hospital setting exist • Limited in scope debriefings are practiced for new hospital staff, but no regular capacity building is in place or regularly planned by hospital facilities	 management service providers. Training carried in 12 regions for major health facilities, and regional administration and integrated into national training system. Training program adopted and replicated by health institutions. Media follows 	For the purposes of dissemination of information on the project activities, as well as on the work of the established pilot centres for the management of medical waste, training workshops were held for representatives of local government bodies from all non-pilot regions (13 oblasts) on the management of POPs, medical waste and state Procurement. Training materials are used by medical organizations when training employees of an organization. In August 2017, the Department of Public Health Protection in East Kazakhstan and in September 2017 in the Health Department of the Kostanay region conducted seminars for representatives of medical institutions of the region on waste management (including the use of destructors and segregation of waste treatment facility) Information on media coverage is provided below.
Outcome 4: Monitoring, learning, adaptive feedback, outreach, and evaluation.	• M&E and adaptive management applied to project in response to needs, mid- term evaluation findings with lessons learned extracted.	 No Monitoring and Evaluation system No evaluation of project output and outcomes 	• Final evaluation report ready in the end of project	• Final evaluation was carried out in July 2017. Final evaluation report was submitted to UNDP in August 2017.

ANNEX 13: DISBURSEMENT OF PROJECT COMMITTED CO-FINANCING, 2013-2017

No.	Sources /Name of Co- financier	Actual disbursed co-financing, in US 1000\$			Committed co- financing (ProDoc) in US 1000\$	% of disbursed / committed co- financing	Notes/Explanation		
		Year1	Year2	Year3	Year4	Total			
1	RK HCM	6,644	5,405	4,000	3,333	19,382	26,578	73 %	Allocated in the form of parallel financing by local budgets for safe management of medical waste, including purchase of services on neutralization of waste, purchase of products for safe management of waste (Containers of safe collection and utilization, color packets), and also in kind in the form of carrying out seminars and trainings to enhance the capacity of medical workers. Dearth of co-financing in the amount of 7,2 mln. Dollars connected with devaluation of currency tenge in 2014-2016 yy. Thus, according to the letter of the Ministry of Public Health of RK dated in 2013, annual co-financing is 1 mlrd. tenge, which in 2013 year consisted 6,6 mln. US dollars, in 2014 y – 5,4 and etc.
2	RSE for PCV of NPCSEEM KOOZ MH Of RK			2	2	4	-	+	This contribution was not envisaged in ProDoc. This amount includes an in kind contribution in the form of providing a conference room for lectures (4 days), lecturing capacity, laboratories and reagents for training
3	RK ME	3,940	3,113	43	31	7,127	7,737	92%	Notwithstanding, that to the line, additionally was included expenses of Republic budget for realization in 2014 year JSC "Zhasyl Damu" of ownerless mercury, declared by judgement, which was entered to the Republic property, index of deliverables do not match 100% due to the devaluation of tenge in 2014-2016 yy.
4	Kazgidromet RSE			1	1	2	-	+	This contribution was not provided for in ProDoc. It provides for in- kind contributions to support the Project work on POP and Mercury Monitoring.
5	Akimat of Pavlodar region	20	16	55	10	101	-	+	This contribution was not provided for in ProDoc. However, this amount can also be considered as a contribution in the form of parallel financing since it is aimed at solving one of the issues that the Project focuses on. The financing provides for an annual environmental monitoring in the Northern Industrial Zone of Pavlodar city polluted with mercury, and the development in 2015 of the Concept for the rehabilitation of this territory.

6	NGOs	96	95	94	2	287	291	99%	Co-financing from the Center "Cooperation for Sustainable
	(Total): The Center "Cooperation for	4	3	2	2	11	15	73%	Development" provided conducting of seminars, trainings on capacity building on legislation in the field of conversion of chemicals and hazardous wastes for industrial organizations. The difference of valid and planned amount connected with the
	Sustainable Development" The Center on	38	38	38	-	114	114	100%	devaluation of tenge. Co-financing from the Center on Introduction of New Environmentally Safe Technologies considered grant (in EURO) of European Union for realization of Project "Empowering civil society
	Introduction of New Environmenta Ily Safe Technologies Ecomuseum	54	54	54	-	162	162	100%	in the Republic of Kazakhstan to improve chemical safety". The Project of EU was realized in total capacity.
7	Private Sector:	57	48	55	26	186	230	81%	Except of planned co-financing contribution in Project document, company "Utilization LLP" participated in Project share in
	-Utilization	5	4	4	2	15	20	75%	organization of safe collection and destruction of outworn medicines
		8	7	5	4	24	33	73%	dollars.
	-Requiem C LLC	10	9	6	5	30	40	75%	The contribution in genuine aspects «Requiem C» LLC and «Astana Paidalany» LLC. The contribution of Ibraikhan and K LTD LLC is made both in
	Paidalany	34	28	20	15	97	137	71%	parallel co-financing for the purchase of equipment and vehicles, and in kind
	-Ibraikhan and K-LTD LLC - Promotkhod Kazakhstan LLP			20		20	-	+	Promothhod LLP in the North Kazakhstan oblast replicated the Project experience for the application of incombustible technologies for neutralizing medical waste, purchased an appropriate autoclave with own funds. Indicated contribution was not considered by Project Document.
	Total	10,757	8,677	4,250	3,405	27,089	34,838	78%	Co-financing from the side of Republic of Kazakhstan, as Governmental and private sector, in national currency, was <u>delivered in full volume</u> . Due to the sudden devaluation of tenge in condition to the beginning and to the end of Project to two times, amount of co- financing in Dollars was decreased.

ANNEX 14: LIST OF TABLES

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	Waste Management in Kazakhstan"	
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ANNEX 15. GEF TRACKING TOOL⁶⁵.

REDUCTION/PHASE OUT AND MANAGEMENT OF MERCURY

	NIP UPDATE, INTEGRATION OF POPS INTO
	NATIONAL PLANNING AND PROMOTING SOUND
Project title	HEALTHCARE WASTE MANAGEMENT IN
Country	KAZAKHSTAN
GEF Agency	UNDP
GEF PMIS #	4612

NEW TOOLS AND REGULATORY, AND ECONOMIC APPROACHES

Indicators	Number ⁶⁶	Qualitative comments from the project team or the GEF Agency
Indicator 1.1.1: Number of demonstrated tools for mercury and waste issues ¹	1	The project developed "Capacity building programme on mercury issues". This programme is used in the trainings with stakeholders and will be posted as on-line course on the site of JSC "Zhasyl Damu" - subordinate enterprise of the Ministry of Energy of the Republic of Kazakhstan.
Indicator 1.1.2: Prioritized list of actions for reducing/eliminating mercury and mercury containing waste	3	Inventory of POPs has been completed. Comprehensive report, including recently updated information and statistical data has been prepared in 2016 and is distributed among stakeholders.

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⁶⁶ 0 = Not applicable: not an objective of the project; 1 = Indicator not considered; 2 = Indicator considered and partly conducted; 3 = Indicator fulfilled.

Indicator 1.2: Number of technologies demonstrated, 18 042 deployed and transferred	Number of replaced medical mercury thermometers.
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ENABLING ACTIVITY

Indicators	Number ⁶⁷	Qualitative comments from the project team or
		the GEF Agency
Indicator 2.1.1: Number and quality of initial assessment activities completed	1	Quantitative assessment of mercury releases to environment was conducted – containing data sources, major sources and national capacities. Recommendations were included. "The report on the inventory of mercury in the Republic of Kazakhstan" was provided to the Ministry of Energy.
Indicator 2.2: Number of ASGM NAPs completed		NA
Indicator 2.4: Number of baseline monitoring stations established and number of laboratories strengthened.		NA

MERCURY REDUCTION

Indicators	Qu (to	antity ons)*	Cost (US\$ /	Qualitative comments from the project
	Project Achieved target to date		ton)	team of the GEF Agency

⁶⁷ 0 = Not applicable: not an objective of the project; 1 = Indicator not considered; 2 = Indicator considered and partly conducted; 3 = Indicator fulfilled.

Indicator 4.1: Amount of Mercury reduced	0,03681	0,0368	459,799	The project phased out 18042 mercury containing medical thermometer, which allows to achieve Project targets.
Details				
Reduction and elimination of the use of mercury and mercury compounds in ASGM	N/A			
Reduction of emission and releases to the environment of mercury from ASGM and processing,	N/A			
Reduction and elimination of mercury from emissive sources ⁴	N/A			
Reduction and elimination of mercury in the global trade including mercury in products	N/A			
Reduction, phase out or elimination of mercury used in certain industrial processes ⁵	N/A			

Reduction of emission and release of mercury from mercury- containing wastes	0,03681	0,0368	459 799	Demercurization of the replaced mercury thermometers was made by LTD "Synap plus" (Almaty city, Kazakhstan). Demercurization technology - thermal desorption equipment (TDU) URL-2M.The recovered mercury is temporarily stored in an environmentally sound manner in the plant and subsequently be reusedl
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REGIONAL APPROACHES IN LDCs AND SIDS

Number⁶⁹

Indicators	Number ⁶⁸	Qualitative comments from the project team or the GEF Agency
Indicator 6.1: The extent to which countries have successfully mainstreamed chemical priorities into national budgets. ¹	NA	
Indicator 6.2: Number of regional/sub- regional level plans developed that account for chemicals and waste issues	3	Regional plans on healthcare waste management in East and Kazakhstan oblasts, Astana city.

PROGRESS IN MIA

Indicators

Qualitative comments from the project team or the GEF Agency

⁶⁸ 0 = Not applicable: not an objective of the project; 1 = Indicator not considered; 2 = Indicator considered and partly conducted; 3 = Indicator fulfilled.

⁶⁹ 0 = Not applicable: not an objective of the project; 1 = Indicator not considered; 2 = Indicator considered and partly conducted; 3 = Indicator fulfilled.

MIA coordinating mechanism in place ²	0	NA
National mercury profile established	0	NA

MANAGEMENT AND DISPOSAL OF POPs

Project title	NIP UPDATE, INTEGRATION OF POPS INTO NATIONAL PLANNING AND PROMOTING SOUND HEALTHCARE WASTE MANAGEMENT IN KAZAKHSTAN
Country	KAZAKHSTAN
GEF Agency	UNDP
GEF PMIS #	4612

New tools and regulatory, and economic approaches

Indicators	Number	Qualitative comments ¹ from the project team or the GEF Agency
Indicator 1.1.1: Number of demonstrated tools for new POPs and waste issues ¹	1	The project developed "Capacity building programme on POPs issues". This programme is used in the trainings with stakeholders and will be posted as on-line course on the site of JSC "Zhasyl Damu" - subordinate enterprise of the Ministry of Energy of the Republic of Kazakhstan

Indicator 1.1.2: Prioritized list of actions for reducing/eliminating POPs and waste	NA	
Indicator 1.2: Number of technologies demonstrated, deployed and transferred	10	Several purchasing autoclaves on infectious healthcare waste disposal

Enabling Activity

Indicators	Number	Qualitative comments ¹		
Indicator 2.3.1: Number of NIP updates completed	1	NA		
Indicator 2.3.2: Number of countries that have integrated the NIP updated process into their own budget ²	0			
Indicator 2.4: Number of baseline monitoring stations established and number of laboratories strengthened.	2 and 0	There 2 monitoring stations in Almaty and North Branch of RSE "Kazhydromet" with capacity for pesticides identification in water - (alpha-HCH, gamma-HCH, 4,4'-DDT, 4,4'- DDE). With the efforts of the project these pesticides are included in the accreditation field of East Branch of RSE "Kazhydromet". Monitoring of uPOPs is impossible owing to the lack of necessary equipment, which is impossible to buy from state budget (because of very high price). Now Project tries to find ways to provide equipment from other sources or to make agreement with other laboratories for carrying out analysis in regular basis		

Progress in update of NIPs

Implementation Status	Yes = 1 No = 0	Qualitative comments ¹ from the project team or the GEF Agency
NIP coordinating mechanism in place ²	1	Together with JSC "Zhasyl Damu", preparatory work is carried out on creation of the National Coordination Center of the Republic of Kazakhstan on persistent organic pollutants (hereinafter - POPs NCC). The Draft Resolution of the Government of the Republic of Kazakhstan on the establishment of the POPs NCC is under the approval stage. The regulations on the National Coordination Center have been developed
Inventories undertaken ³	1	Inventory of POPs has been completed. Comprehensive report, including recently updated information and statistical data has been prepared in 2016 and is distributed among stakeholders
Draft updated NIP prepared	1	NIP update on new POPs finalized and the update of NIP on u-pops has been initiated – the submission is planned for 2017.
Updated NIP submitted to the Stockholm Convention	1	The updated National Implementation Plan on new POPs for 2015-2028 was approved by decree of Ministry of Energy # 228 dated 30/12/2014. It was submitted to the Ministry of Foreign Affairs to be presented to the Secretariat for the Stockholm Convention.

POPs elimination or reduction

- 1. <i>.</i>	Quantity (tons)		Cost ¹	Qualitative comments ^{2,3} from the
Indicators	Project target	Achieved to date	(\$ per ton)	project team or the GEF Agency
Indicator 3.1: Amount and type of POPs eliminated or reduced	125,53 g TEQ	16,7q TEQ/year in ash residue – 0,1 q TEQ/year.	0	Until the end of 2017 the general volume of decontaminated wastes (in all existed equipment) consist 1,250 kg. Which will make lower uPOPs in wastes until 16,7q TEQ/year in ash residue – 0,1 q TEQ/year.
Details				
Disposal of PCB concentrated oils	N/A			The project activity is directed to reducing uPOPs
Disposal of PCB contaminated oils	N/A			
Disposal of PCB capacitors	N/A			
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Disposal of PCB contaminated equipment and wastes	N/A			
Reduction of annual use of DDT	N/A			
Reduction or avoidance of UP-POP through BAT/BEP application	125,53 g TEQ	16,7q TEQ/year in ash residue – 0,1 q TEQ/year.	0	See above
Disposal of obsolete pesticides, including POPs pesticides	N/A			
Safeguard of obsolete pesticides, including POPs pesticides	N/A			
Elimination or restriction of the production and use of newly listed POPs ⁴	N/A		NA	

Regional approaches in LDCs and SIDS

Indicators	Number	Qualitative comments ¹ from the project team or the GEF Agency
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Terminal Evaluation of UNDP-supported GEF-financed Project "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan"

Indicator 6.1: The extent to which countries have successfully mainstreamed chemical priorities into national budgets. ¹	NA	
Indicator 6.2: Number of regional/sub-regional level plans developed that account for chemicals and waste issues	NA	

ANNEX 16. PHOTOLOG.



Picture 1. Mr. Ermek Omarbekov, Chief Doctor of PSE on REM Center of Mother and Child under the Healthcare Department of East-Kazakhstan Regional Akimat during checking the use of specialized transportation for HCWM for healthcare waste treatment.



Picture 2. Distracter and supporting equipment for collecting medical wastes in the PSE on REM of Center of Mother and Child under the Healthcare Department of East-Kazakhstan Akimat.

Terminal Evaluation of UNDP-supported GEF-financed Project "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan"

Terminal Evaluation of UNDP-supported GEF-financed Project "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan"



Photo 3. New autoclave for healthcare waste treatment in PSE on REM Center of Mother and Child under the Healthcare Department of East-Kazakhstan Regional Akimat. In addition to the equipment the pilot projects have received special uniform and masks.



Photo 4. Picture is made during Control and monitoring of autoclaving systems for healthcare waste treatment in the city hospital of Rudnyi in July 2017.



Photo 5. In the time of TE the equipment and containers and other parts of technology has been received and have been installed in Kostanay Ecomedutilizatsiya LLP and just started its operation.

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Picture 6. The workload and operation of autoclave for healthcare waste treatment in Kostanay Ecomedutilizatsiya LLP is recorded by staff in a log. The log represents information on waste received for treatment.

Terminal Evaluation of UNDP-supported GEF-financed Project "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan"



Picture 7. Recently installed equipment in the PSE on REM Central Rayon Hospital of Katon-Karagay Rayon under the Healthcare Department of East-Kazakhstan Regional Akimat.



Photo 8. The old combustion technologies are still in operation. (Incinerator of Narcological dispensary of Kostanay region). Environmental as well as health and safety requirements are not followed. It was expected that after installation of autoclaves in this region the old equipment will be dismantled and closed. For the Project, it is another challenge as a subject for post-project monitoring.



Photo 9. Emission of uPOPs from old combustion oven near village Zatobolovka Kostanay Region. Autoclaves are installed by the Project in 3 pilot regions. There are remained 13 regions where the old combustion technology is still in use.

ANNEX 17: EVALUATION REPORT CLEARANCE FORM

ANNEX G IN THE TOR: EVALUATION REPORT CLEARANCE FORM

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

Date:	
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	Date:

ANNEX 18: TERMINAL EVALUATION REPORT AUDIT TRAIL

The following is a template for the evaluator to show how the received comments on the draft TE report have (or have not) been incorporated into the final TE report. This audit trail should be included as an annex in the final TE report.

To the comments received on 23 August 2017 from Ms. Victoria Baigazina, Programme Associate of SDU Unit, Project Supervisor, UNDP CO to the Terminal Evaluation of the UNDP-supported GEF-financed Full-Sized Project "NIP Update, Integration of POPs into National Planning and Promoting Sound Healthcare Waste Management in Kazakhstan, UNDP PIMS # 4612.

The following comments were provided in track changes to the draft Terminal Evaluation report; they are referenced by institution ("Author" column) and track change comment number ("#" column):

Author	#	Para No./ comment location	Comment/Feedback on the draft TE report	TE response and actions taken
VB (Victoria Baigazina)	1	Page 3	To add complete name of ADB – Development Bank.	Done. The complete name of ADB – Asian Development Bank
VB	2	Page 3	Abbreviation "ADS ZhKH - Agency on Construction, Housing and Municipal Infrastructure (Kazakhstan)" is not relevant for this project and should be deleted.	Done. Abbreviation is deleted as not relevant.
VB	3	Page 3	Abbreviation: "CAO Association of Apartment Owners" is not relevant for this project and should be deleted.	Done. Abbreviation is deleted as not relevant.
VB	4	Page 4	Delete abbreviation "UN -United Nations".	Done. Abbreviation is deleted as it is repeated.