



RESTRUCTURING PAPER
ON A
PROPOSED PROJECT RESTRUCTURING
OF
ZAMBIA - MINING AND ENVIRONMENTAL REMEDIATION AND IMPROVEMENT PROJECT
APPROVED ON DECEMBER 16, 2016
TO
MINISTRY OF FINANCE, REPUBLIC OF ZAMBIA

Environment, Natural Resources and The Blue Economy Global Practice

Eastern and Southern Africa Region

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ABBREVIATIONS AND ACRONYMS

CDC	Center for Disease Control
EPF	Environmental Protection Fund
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
GBV/SEA	Gender Based Violence and Sexual Exploitation and Abuse
IFRs	Interim Financial Reports
M&E	Monitoring and Evaluation
MOH	Ministry of Health
MSD	Mines Safety Department
PCU	Project Coordination Unit
PIU	Project Implementation Unit
PAD	Project Appraisal Document
RPA	Radiation Protection Authority
RPF	Resettlement Policy Framework
RAP	Resettlement Action Plan
SEA/SH	Sexual Exploitation and Abuse and Sexual Harassment
TD	Tailings Dam
ZEMA	Zambia Environmental Management Agency



BASIC DATA

Product Information

Project ID P154683	Financing Instrument Investment Project Financing
Original EA Category Full Assessment (A)	Current EA Category Full Assessment (A)
Approval Date 16-Dec-2016	Current Closing Date 30-Jun-2022

Organizations

Borrower Ministry of Finance, Republic of Zambia	Responsible Agency
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Project Development Objective (PDO)

Original PDO

To reduce environmental health risks to the local population in critically polluted mining areas in Chingola, Kabwe, Kitwe and Mufulira municipalities, including lead exposure in Kabwe municipality

Summary Status of Financing (US\$, Millions)

Ln/Cr/Tf	Approval	Signing	Effectiveness	Closing	Net Commitment	Disbursed	Undisbursed
IDA-59370	16-Dec-2016	29-May-2017	30-Nov-2017	30-Jun-2022	65.60	21.70	43.49

Policy Waiver(s)

Does this restructuring trigger the need for any policy waiver(s)?

No



I. PROJECT STATUS AND RATIONALE FOR RESTRUCTURING

1. The Zambia Mining and Environmental Remediation and Improvement Project was approved by the World Bank Board of Executive Directors on December 16, 2016, and the project became effective on November 30, 2017. The Project Development Objective (PDO) is to reduce environmental health risks to the local population in critically polluted mining areas in Chingola, Kabwe, Kitwe and Mufulira municipalities, including lead exposure in Kabwe municipality.
2. Initial project implementation was delayed by 15 months due to the following main reasons:
 - i. Eleven months delay from Board approval in project effectiveness
 - ii. Seven months delay due to completion of the first project restructuring, which was done to update the project to the new World Bank Procurement Framework and Procurement Regulations of July 2016. The Amendment to the Financing Agreement was signed on June 11, 2018, which included revision of the definition for "Procurement Plan" and a new definition for "Procurement Regulations". This paved the way for secondment of staff and activating the Project Implementation Units, which was completed in December 2018.
3. Project activities picked up momentum in 2019 and disbursement increased from 15 percent in January 2019 to 22.6 percent in May 2020. However, the Coronavirus Disease 2019 pandemic interrupted project implementation during 2020 by (a) limiting project staff travel (b) preventing expatriate contractor staff access to project sites to complete site-specific data collection studies and stakeholder consultation and workshops and (c) social distancing protocols reduced the number of contractor staff that could work on site. With easing of the lockdown since August 2021, activities picked up momentum slowly, resulting in disbursement increasing to US\$ 21.7 million, equivalent to a disbursement rate of 33.38 percent (June 2022) . Details of status of activities under all components are provided below:
4. **Component 1:**
 - i. *Upgrading and rehabilitating Kabwe canal:* Technical design was completed in September 2020; Environmental and Social Impact Assessment and Management Plan (ESIA and ESMP) was cleared by the World Bank in September 2021. Bidding process for civil works underway and contract expected to be signed by end June 2022.
 - ii. *Rehabilitation of Tailing Dam 10:* Technical design was completed in March 2021. The ESIA was cleared by the World Bank in May 2022. Bidding process for civil works underway and contract expected to be signed by September 2022.
 - iii. *Kabwe integrated landfill:* This activity is being cancelled due to difficulty of finding appropriate site and insufficient time and technical expertise for establishing a waste management system in Kabwe, needed for financial viability of public-private partnership arrangements
 - iv. *In-situ remediation in Kabwe:* Characterization, remediation options and cost-benefit study was completed in September 2021; Pilot remediation works of 20 households was completed in March 2022, while works at the Mines Primary school is almost complete. In-situ remediation works are to be replicated across other hotspot areas, for which the bidding process has also started, and contract expected to be signed by August 2022. A draft ESMP has been developed and submitted to the World Bank for review.
 - v. *Rehabilitation and greening of 12 schools:* This activity has been riddled with procurement challenges for the past 18 months. The procurement and contractual issues have been addressed and the drilling



of the boreholes and infrastructure for water storage, pumping and distribution solar panels are now underway.

- vi. *Construction of lab in Ndola for Zambia Environmental Management Agency (ZEMA):* Technical design completed in May 2022 and the ESMP was cleared by the World Bank in April 2022. Bidding process for civil works is underway and contract expected to be signed by July 2022.

5. **Component 2:** Policy studies for reform of mining sector and other environmental and ecological studies commissioned by Mines Safety Department (MSD) and ZEMA respectively have been completed. Equipment procured by ZEMA is being utilized satisfactorily, and ZEMA has reported increase in inspections and environmental monitoring. ZEMA is also close to operationalizing Continuous Environmental Monitoring System and an online Environmental Information Registry. The equipment procured by MSD has been underutilized so far due to institutional challenges and lack of financial resources and coordination with the parent agency.
6. **Component 3:** The health interventions for blood lead level testing and treatment have been successfully rolled out in Kabwe. There was a high uptake for these services, which was evidenced by the large numbers tested and treated during the pandemic and discussions with community members and health care providers showed keen interest in this service. There were several aspects of the intervention that worked, including integration at the district and clinical level in Kabwe and record keeping, and almost 12,000 children were tested, of which 12.2 percent underwent treatment. According to the Center for Disease Control (CDC), the approach using test kits cannot be continued as they were producing falsely low results. CDC has proposed new methodology using higher complexity testing such as inductively coupled plasma mass spectrometry or graphite furnace atomic absorption spectroscopy¹. Unfortunately, this global recall of test-kits in September 2021 derailed the momentum of this activity and the project, in collaboration with the District Health Office, is exploring the best alternative option, including identifying the new equipment and updating medical protocols for continuing screening and testing in the community. The project has also completed the process and received reimbursement of funds for test kits which were procured but not utilized. Livelihood proposals from eight community groups in Mufulira, Chingola and Kabwe are being implemented and additional 11 proposals have recently been approved for funding. The project has initiated an active communications campaign through social media platforms, community outreach and school programs. The project has successfully undertaken an extensive and robust communications and outreach campaign.
7. **Project Management (Component 4):** The project has undergone some staffing changes to ensure appropriate technical expertise is located as per activity requirements. Kabwe Project Implementation Unit (PIU) has been enhanced with an environment and social specialist and civil engineer to work on the activities. In addition to the external factors which have delayed implementation, internal factors include: i) inefficient leadership, communication and decision making and as a result, ii) deficient individual accountability, project administration and contract management, as well as iii) inadequate communication within the PIU team and poor coordination with external stakeholders. Procurement processes have had ongoing challenges, including contract cancellations, multiple rebidding processes which have resulted in inordinate delays.

¹ [LeadCare Expanded Recall Questions and Answers \(cdc.gov\);
https://emergency.cdc.gov/han/2021/han00445.asp](https://emergency.cdc.gov/han/2021/han00445.asp)



8. The Mid Term Review mission which was held in March 2021 assessed that the PDO remains critical and relevant although implementation progress was rated Moderately Unsatisfactory (MU). A technical mission fielded in May 2022 maintained this assessment and documented the need for change in project leadership, without which the project would not meet its objectives and outcomes even over the period of extension. The World Bank has received written confirmation from the Permanent Secretary (PS), Ministry of Mines agreeing to the recommendations of the World Bank, including change of project leadership in Lusaka and Kabwe. The PS has committed that the process for hiring new project coordinators is to be fast-tracked, and the process is expected to be completed by end July 2022, after approval from the World Bank.
9. Request for project restructuring was received in July 2021 and the restructuring process was started. However, following elections in September 2021, the new administration needed to submit a revised request for project restructuring. Two requests were received - dated March 30, 2022, and April 25, 2022. The former included reallocations of budget across components, revision of the Results Framework, simplification of disbursement categories, cancellation of the Kabwe Landfill activity and US\$ 2.55 million from project loan. The second letter requested project extension for 24 months. A detailed Action Plan and revised implementation schedule has also been received. The World Bank has assessed that the PDO is achievable and the revised work plan and all actions can be completed within the extension period. There are no outstanding interim financial reports.
10. **Safeguards Performance** is currently rated as Moderately Satisfactory (MS). Implementation and monitoring of the Feedback and Grievance Redressal Mechanism is on-going, including sensitization through non-physical means during COVID-19 restrictions. Various channels for reporting complaints have been established. The Gender Based Violence and Sexual Exploitation (GBV-SE) risk assessment was rated low but will need to be reassessed prior to start of larger civil works. ESMPs are prepared and implemented for the smaller civil works (upgrading of existing buildings, small-scale livelihoods projects etc); the larger civil works activities (rehabilitation of Kabwe canal and Tailing Dam #10 (TD10) are yet to commence.
11. **Procurement** performance is rated as MU and risk rating is Substantial. In addition to the Procurement Post review, the Bank will continue to carry out informal reviews and clearances as needed for specific activities under the project. This will mostly be applicable for the Kabwe canal works and rehabilitation works of TD10.
12. **Financial Management** performance is rated as MS and risk rating is Substantial. The project has been submitting Interim Financial Reports regularly although with some inaccuracies.
13. **Compliance with covenants.** The project is compliant with all its legal covenants as stipulated in the Financing Agreement.

II. DESCRIPTION OF PROPOSED CHANGES

14. The proposed restructuring is necessary to achieve the PDO, as detailed below:
 - (i) **Project Extension of 24 months, until June 28, 2024** is being requested for the following reasons:



- a. The extension will allow the project to take these large infrastructure works to completion.
 - i. Technical Design for the rehabilitation of TD10 is now finalized and the Government has chosen an environmentally sound, cost-effective option. Rehabilitation of such large TDs pose complex infrastructural and technical challenges and the project needs the extended timeline to ensure that the rehabilitation works are undertaken to the highest standards². It is expected that construction works for TD10 will start in Q2 FY23.
 - ii. Procurement of civil works for Kabwe canal has commenced and works are expected to start by Q2 FY23.
- b. Restarting the Lead testing and treatment campaign for children suffering from lead poisoning. The issue of lead pollution and children's rights to clean environment has attracted international scrutiny. The project needs to continue this multi-sectoral intervention and showcase the importance of impacts of simultaneous actions of reducing environmental exposure to lead pollution and the clinical interventions
- c. Results from the livelihoods activities are indicating a movement away from hazardous activities to more sustainable community driven activities. Given the importance of this activity, in light of job creation and addressing environmental health issues, extension will allow the project to reach out to more community groups and vulnerable individuals.
- d. The extension will enable policy and technical studies to be mainstreamed into policy changes and physical investments.

(ii) Cancellation of Kabwe Landfill activity (Component 1.1) will enable the project technical team to focus on the large and complicated infrastructural activities with a direct bearing on the Project Development Objective which are in various stages of progress. This includes cancellation of US\$ 2.55 million from Component 1.1, Category 1.

(iii) Reallocation of funds across components and simplification of disbursement categories

(iv) Revision of the applicable World Bank's Procurement Regulations to include the latest World Bank's Procurement Regulations for Investment Project Financing Borrowers for Goods, Work, Non-Consulting and Consulting Services (November 2020) to include enhanced risk based provisions and enhanced Gender Based Violence and Sexual Exploitation and Abuse clauses in the Standard Procurement Documents for Civil Works.

(v) Adjusting the Results Framework to include updated targets The PDO indicators and the intermediate indicators have been revised to adjust to i) the changes in project implementation timeline ii) cancellation of the Kabwe landfill; iii) adjusting the share of mineral rights holders complying with the Environmental Protection Fund; iv) target number of people being treated for lead pollution v) beneficiaries of the livelihood program and vi) awareness generated on lead pollution.

² There are multiple reasons which result in failure of tailing dams, resulting in the discharge of significant quantities of tailings into the natural environment, causing serious casualties and economic losses. 1) As tailings dams are water permeable, their stability is greatly influenced by the seepage field. 2) The permeability of the foundation plays an important role in the stability of the dam structure. Poor permeable base materials cause an increase in pore pressure and shear stress on the foundation. 3) During heavy rainfall events, if the permeability of the dam is poor, rainwater is discharged at an extremely slow rate, resulting in the overtopping phenomenon, which drastically affects the stability of the dam.



III. SUMMARY OF CHANGES

	Changed	Not Changed
Results Framework	✓	
Components and Cost	✓	
Loan Closing Date(s)	✓	
Cancellations Proposed	✓	
Reallocation between Disbursement Categories	✓	
Disbursement Estimates	✓	
Implementation Schedule	✓	
Implementing Agency		✓
DDO Status		✓
Project's Development Objectives		✓
PBCs		✓
Disbursements Arrangements		✓
Overall Risk Rating		✓
Safeguard Policies Triggered		✓
EA category		✓
Legal Covenants		✓
Institutional Arrangements		✓
Financial Management		✓
Procurement		✓
Other Change(s)		✓
Economic and Financial Analysis		✓
Technical Analysis		✓
Social Analysis		✓
Environmental Analysis		✓



IV. DETAILED CHANGE(S)

COMPONENTS

Current Component Name	Current Cost (US\$M)	Action	Proposed Component Name	Proposed Cost (US\$M)
Remediation of Contaminated Hotspots and Improvement of Environmental Infrastructure	29.60	Revised	Remediation of Contaminated Hotspots and Improvement of Environmental Infrastructure	27.05
Enhancing Institutional capacity to strengthen environmental governance and compliance	13.50	Revised	Enhancing Institutional capacity to strengthen environmental governance and compliance	11.50
Reducing environmental health risks through localized interventions	18.50	No Change	Reducing environmental health risks through localized interventions	18.50
Project Management, Monitoring and Evaluation	4.00	Revised	Project Management, Monitoring and Evaluation	6.00
TOTAL	65.60			63.05

LOAN CLOSING DATE(S)

Ln/Cr/Tf	Status	Original Closing	Revised Closing(s)	Proposed Closing	Proposed Deadline for Withdrawal Applications
IDA-59370	Effective	30-Jun-2022		28-Jun-2024	28-Oct-2024

CANCELLATIONS

Ln/Cr/Tf	Status	Currency	Current Amount	Cancellation Amount	Value Date of Cancellation	New Amount	Reason for Cancellation
IDA-59370-001	Disbursing&Repaying	XDR	47,800,000.00	1,895,122.00	05-Apr-2022	45,904,878.00	BORROWER'S REQUEST FOR COUNTRY REASONS

**REALLOCATION BETWEEN DISBURSEMENT CATEGORIES**

Current Allocation	Actuals + Committed	Proposed Allocation	Financing % (Type Total)	
			Current	Proposed
IDA-59370-001 Currency: XDR				
iLap Category Sequence No: 1	Current Expenditure Category: Gd,Wk,Ncs,Cs,Trg,OC excl KMC & ZEMA			
29,400,000.00	5,997,752.82	5,997,753.00	100.00	100.00
iLap Category Sequence No: 2	Current Expenditure Category: Gd,Wk,Ncs,Cs,Trg,OC , ZEMA			
5,830,000.00	2,224,362.09	2,224,363.00	100.00	100.00
iLap Category Sequence No: 3	Current Expenditure Category: Gd,Wk,Ncs,Cs,Trg,OC, KMC			
10,200,000.00	1,808,338.36	1,808,339.00	100.00	100.00
iLap Category Sequence No: 4	Current Expenditure Category: Sub-Project Grants prt 3.2a KMC			
590,000.00	0.00	0.00	100.00	100.00
iLap Category Sequence No: 5	Current Expenditure Category: Sub-Project Grants prt 3.2a Kitwe			
300,000.00	7,057.96	7,058.00	100.00	100.00
iLap Category Sequence No: 6	Current Expenditure Category: Sub-Project Grants pt 3.2a Chingola			
300,000.00	4,174.16	4,175.00	100.00	100.00
iLap Category Sequence No: 7	Current Expenditure Category: Sub-Project Grants pt 3.2a Mufulira			
300,000.00	17,524.86	17,525.00	100.00	100.00
iLap Category Sequence No: 8	Current Expenditure Category: PPF REFINANCING			
880,000.00	678,601.01	678,602.00		



iLap Category Sequence No: 9	Current Expenditure Category: Goods, works, non-consulting services, consulting services, Training and Operating Costs, excluding Part 3.2a		
0.00	0.00	34,897,063.00	
iLap Category Sequence No: 10	Current Expenditure Category: Sub-Project Grants under Part 3.2(a) of the Project		
0.00	0.00	270,000.00	
Total	47,800,000.00	10,737,811.26	45,904,878.00

DISBURSEMENT ESTIMATES

Change in Disbursement Estimates

Yes

Year	Current	Proposed
2017	4,999,999.97	1,153,181.88
2018	9,999,999.96	4,634,649.18
2019	9,999,999.96	6,372,793.19
2020	15,600,000.00	5,496,611.75
2021	15,000,000.00	3,007,635.80
2022	9,999,999.96	7,890,000.00
2023	0.00	20,128,000.00



Results framework

COUNTRY: Zambia

Zambia - Mining and Environmental Remediation and Improvement Project

Project Development Objectives(s)

To reduce environmental health risks to the local population in critically polluted mining areas in Chingola, Kabwe, Kitwe and Mufulira municipalities, including lead exposure in Kabwe municipality

Project Development Objective Indicators by Objectives/ Outcomes

Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
To reduce environmental health risks to the local population in critically polluted mining areas								
Direct project beneficiaries (number), of which female (%) (Number)	0.00	0.00	0.00	0.00	0.00	1,000.00	5,000.00	13,000.00
<i>Action: This indicator has been Revised</i>								
Share of population in the project areas that are aware of project investments and benefits - (disaggregated by vulnerable people and gender) (Percentage) (Percentage)	0.00	0.00	10.00	30.00	50.00	70.00	70.00	70.00
<i>Action: This indicator has been Revised</i>								
People in Kabwe reported to have more than 50% reduction in Blood Lead	0.00	0.00	100.00	1,000.00	3,000.00	4,000.00	4,000.00	4,000.00



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
levels (BLL) (disaggregated by age below 15) (Number (Number))								
<i>Action: This indicator has been Revised</i>								
Share of population living within 500 m from lead contamination hotspots in project area (Percentage) (Percentage)		100.00	100.00	100.00	80.00	50.00	30.00	30.00
<i>Action: This indicator has been Revised</i>								

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Remediation of Contaminated Hotspots and Improvement of Environmental Infrastructure								
Contaminated land managed or dump sites closed under the project (Hectare(Ha))		0.00	0.00	0.00	0.00	0.00	0.00	10.00
<i>Action: This indicator has been Revised</i>								
Enhancing Institutional capacity to strengthen environmental governance and compliance								



Indicator Name	PBC	Baseline	Intermediate Targets					End Target
			1	2	3	4	5	
Coverage of project by ZEMA monitoring of water, soil and air quality of project area (%) (Percentage)		0.00	0.00	10.00	30.00	50.00	80.00	80.00
Action: This indicator has been Revised								
Share of mines in project area covered by annual safety inspection by honorary inspectors (Percentage) (Percentage)		0.00	0.00	10.00	25.00	35.00	45.00	45.00
Action: This indicator has been Revised								
Share of mineral rights holders (excluding artisanal mineral rights holders) complying with the Environmental Protection Fund. (Percentage)		20.00	0.00	0.00	0.00	0.00	0.00	30.00
Action: This indicator has been Revised								
Reducing environmental health risks through localized interventions								
School children in Kabwe targeted for awareness on prevention of exposure to Lead contamination (Number) (Number)		0.00	0.00	2,000.00	10,000.00	20,000.00	30,000.00	30,000.00



The World Bank

Zambia - Mining and Environmental Remediation and Improvement Project (P154683)
