

# Environmental Monitoring Report

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# 1 Semiannual Report  
June 2022

## Mongolia: Developing the Economic Cooperation Zone Project

Prepared by the project implementation unit for the Office of the Deputy Prime Minister and the Asian Development Bank.

## **CURRENCY EQUIVALENTS**

(as of 15 June 2022)

Currency unit	–	togrog (MNT)}
MNT1.00	=	\$0.00032
\$1.00	=	MNT3,117.75

## **ABBREVIATIONS**

ODPM	–	Office of the Deputy Prime Minister
ADB	–	Asian Development Bank
ZUFZGO	–	Zamyn-Uud Free Zone Governor's Office
PIU	–	project implementation unit
MET	–	Ministry of Environment and Tourism
MCUD	–	Ministry of Construction and Urban Development
ZUFZ	–	Zamyn-Uud Free Zone
DECZP	–	Developing the Economic Cooperation Zone Project
SPS	–	Safeguard Policy Statement
DEIA	–	detailed environmental impact assessment
EMP	–	environmental management plan
GASI	–	General Agency for Specialised Inspection
MOF	–	Ministry of Finance
GEIA	–	general environmental impact assessment
GRM	–	grievance redress mechanism
GRC	–	grievance redress committee
IA	–	implementing agency
IEE	–	initial environmental examination
EC	–	environmental consultant
GAP	–	gender action plan

## **NOTE**

In this report, "\$" refers to United States dollars.

This environmental monitoring report is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

# Environmental Monitoring Report

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Project Number: 51410-001  
Loan Number: 3936 MON  
January-June 2022

## Mongolia: Developing the Economic Cooperation Zone Project /L3936-MON/

### Environmental Monitoring Semi-Annual Report

Prepared by Project Implementation Unit for the Office of the Deputy Prime Minister and the Asian Development Bank.

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(as of 15 June 2022)

Currency unit	–	Tugrug (MNT)
MNT1.00	=	\$0.00032
		MGL
USA \$1.00	=	₮3120.78

## **ACRONYMS AND ABBREVIATIONS**

ODPM	Office of the Deputy Prime Minister
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ZUFZGO	Zamyn-Uud Free Zone Governor's Office
PIU	project implementation unit
MET	Ministry of Environment and Tourism
MCUD	Ministry of Construction and Urban Development
ZUFZ	Zamyn-Uud Free Zone
DECZP	Developing the Economic Cooperation Zone Project
SPS	Safeguard Policy Statement
DEIA	detailed environmental impact assessment
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## I. INTRODUCTION

### A. Purpose of report

1. The purpose of this Environmental monitoring report is to describe and assess progress for implementation of the environmental management plan (EMP) for the Developing the Economic Cooperation Zone Project /L3936/, for the reporting period January to June 2022. This Environmental monitoring report is submitted in compliance with the Safeguard Policy Statement (SPS)<sup>1</sup> of the Asian Development Bank (ADB) and the loan agreement between ADB and the project executing agency.

### B. Project information summary

Project name	Developing the Economic Cooperation Zone Project
Project number	51410-001
Country	Mongolia
ADB loan number	L3936-MON
Funded by	ADB
Executing Agency	Office of Deputy Prime Minister
Implementing Agencies	Ministry of Construction and Urban Development, Zamyn-Uud Free Zone Governor's Office
Loan amount	USD30 million, Other \$5.76 million
Date of Signing Loan Agreement	2 July 2020
Loan effectiveness date	21 August 2020 to 31 December 2025
Loan Closing Date	30 June 2026
Project location, area	Zamy-Uud soum, Dornogobi aimag

### C. Project outcome, outputs and subcomponents

2. ADB is supporting the Government of Mongolia to achieve economic diversification by developing and operationalizing the Zamyn-Uud Free Zone (ZUFZ). The project will help resolve the unrealized potential for the proposed Mongolia-PRC economic cooperation zone at the Zamyn-Uud–Erenhot of Inner Mongolia Autonomous Region through (i) construction and operation of infrastructure and facilities; (ii) promotion of sustainable management and operation; and (iii) establishment of the port of entry system in the free zone. The project will have the following outcome:

Output 1: Zamyn-Uud free zone infrastructure and facilities constructed and operational

Output 2: Sustainable operations and management of Zamyn-Uud free zone promoted

Output 3: Zamyn-Uud free zone port of entry system established

### D. Cost of project

3. The project is estimated to cost \$35.76 million. ADB will fund the expenditures in relation to civil works, goods, project management and consulting services (including taxes and duties estimated at \$0.43 million) equivalent to \$30 million. The government will finance a total of \$5.76 million equivalent of in-kind contribution for: (i) border security for the free zone estimated at MNT9 billion and (ii) exemptions of 10% value added taxes on goods and civil works and 5.5% customs duties on imported goods estimated at \$2.79 million. ADB will finance 83.9% and the government will cover 16.1% of the project cost.

### E. Involuntary resettlement and indigenous peoples

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<sup>1</sup> ADB. 2009. Safeguard Policy Statement. Manila.

4. The project has been classified as category C for resettlement and category C for indigenous peoples following ADB's SPS. A Due Diligence Report for the proposed project confirms that there are neither any involuntary land acquisition nor resettlement impacts nor impacts on any specific ethnic minority communities that would trigger the requirements of ADB's SPS. The project area where infrastructure and facilities will be constructed or installed are within the government-owned lands. If due to unforeseen circumstances, the project involves any such impacts during detailed design and project implementation, the executing agency will ensure that the project will comply with the applicable laws and regulations of Mongolia and ADB's SPS.

#### **F. Location of the project and boundary**

5. The ZUFZ project site is in Zamyn-Uud soum, Dornogobi aimag: approximately 660 kilometers southwest from Ulaanbaatar and 8 kilometers north from the border town Erenhot in the PRC.

Boundary of the project site. Upbuilding work will be implemented on the implementation central first phase area in around 300 hectare of area occupying totally 900 hectare, planned to develop Zamyn-Uud free zone for a long period (Figure 1).



Figure 1. Location overview mapping of first phase area occupying around 300 hectare of ZUFZ

## II. PROJECT IMPLEMENTATION PROGRESS (As of June 2022)

6. The project is divided into three (pre-construction, construction, operation) phases. As of June 2022, the project is in pre-construction.

### A. Engineering geological survey

7. “Mintoryes” LLC was selected to conduct an engineering geological research and detailed analysis of soil pollution, eliminate/ reduce soil pollution, make recommendations and drain suspended water in an area of approximate 90 hectares (Figure 2) in the “Zamyn-Uud” free zone. They include:

8. **Composition I.** To conduct an engineering-geological survey at the Zamyn-Uud Free Zone area in order to develop a detailed engineering design according to the terms of reference. The depth and distance between boreholes have been planned under the relevant provisions of Building Norms and Rules 11-03-01 to conduct civil engineering and geological surveys at the territory of Mongolia. According to the terms of the contract, the survey will cover each of the buildings and structures inside total area of 90 hectares. Pursuant to the engineering-geological survey plan, the average distance between boreholes was 100 m and the depth of the borehole was drilled down to the depth of 7.5-20 m according to the terms of reference and standards. In order to sample the borehole without disturbing the natural conditions of the soil, an engineering-geological record was made on the outspread, location and characteristics of the soil and rock by column drilling and the soil was drilled with UGB-50M-00 drilling rig to determine the soil properties. Total 153 samples were taken and fully analyzed in the laboratory (Figure 2).



Figure 2. Site location where the Mintoryes LLC conducted a survey and borehole drilling points

9. **Composition II.** A methodology for elimination/reduction based on detailed identification of existing soil pollution in Zamyn-Uud soum shall be developed and a work shall be carried out in accordance with this methodology. Based on the detailed analysis of soil pollution in the “Zamiin-Uud” free zone and the task of elimination/reduction of soil pollution, soil drainage and the conclusion on the unscheduled inspection of the General Agency for Specialized Inspection, dated on October 29, 2020, Samples were taken from highly contaminated areas for (i) soil and (ii) analysis of heavy metal contamination in surface water



(iii) for soil microbiological analysis and following analysis were performed in the laboratory of “Nart SHUUN CONSULTING” LLC.

10. (i) *Test results for heavy metals in soil samples.* Heavy metal contamination of the soil of card of the old sewage, dumped in Zamyn-Uud soum was analyzed (Figure 2). Within the scope of the borehole drilling work inside and outside the Zamyn-Uud Free Zone, 29 soil boreholes down to 3.0 meters deep were drilled with 56 agrochemical and heavy element soil samples. Soil quality according to analysis of heavy metals taken from the soil of the sewage card. Soil samples taken from the construction site where the old sewerage card and the Gateway facility would be constructed were submitted to the SGS IMME laboratory for determination the level of heavy metal (non-organic) soil contamination. Please refer to the Table No.1 for a comparison of the test results from the soil samples with the MNS 5850:2019 standard Soil Quality, Soil pollutants permissible value and the results of the GASI soil test. Soil quality, soil pollutants permissible value which are cadmium, cobalt, chromium, copper, nickel, strontium, vanadium, and zinc are complying with the standard MNS 5850:2019, the amount of lead in M-3 and molybdenum in M-18, sampled in the pollutant card area, exceeded the maximum pollutants permissible value of heavy metals or was found to be contaminated with heavy metals according to the analysis of the soil samples provided to the laboratory (SGS IMME).

11. The results of these heavy metal pollution tests are subject to change due to climate change and natural phenomena.



Figure 3. Points where heavy metal contamination are revealed in soil samples.

№	Heavy metals	MNS 5850:2019 standard	Test result of the GASI of 2020	Sampled point			
				M-3	M-18	Borehole 89	
						Depth 3.0m	Depth 4.6m
1	Cadmium (Cd)	1	0	0	0	0	0
2	Cobalt (Co)	30	-	5	8	-	-
3	Chromium (Cr)	60	22	20	34	24.2	22.4
4	Cuprum (Cu)	60	7.2	10.6	14.3	4	3.4
5	Molybdenum(Mo)	2	0	1	4	-	-
6	Nickel (Ni)	60	5	7	14	6.3	5.5
7	Lead (Pb)	50	16	63	27	18.2	20.5
8	Strontium (Sr)	600	157	161	212	-	-
9	Vanadium (V)	100	32	29	46	-	-
10	Zinc (Zn)	100	25	29	63	15.6	17.2

Table 1. Results of analysis of soil heavy metal contamination

12. (ii) *Analysis of heavy metal contamination in groundwater.* Six water samples and sanitary test samples were taken from the groundwater. When the results of analysis of heavy metals in groundwater taken from groundwater aquifers outspread in the area of “Zamyn-Uud” free zone are compared with water quality and maximum permissible levels of groundwater pollutants MNS 6148:2010, there are lead and chromium contamination in the lakes and boreholes to the east (Borehole 90) and west (Borehole 89) located within the Zamyn-Uud Free Zone fence and zinc contamination in the samples, taken from borehole water to the east of Lake (Borehole 90).

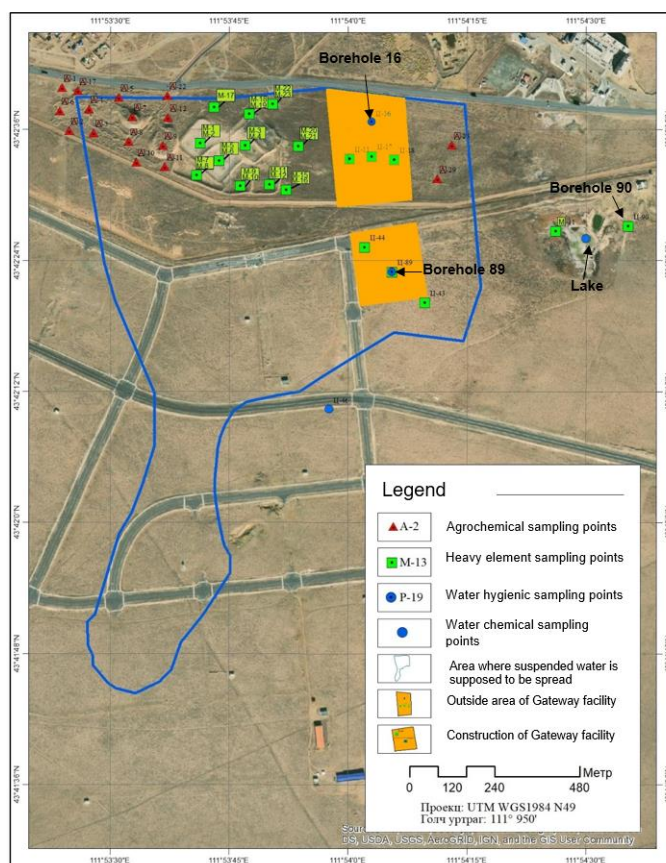


Figure 4. Soil and groundwater sampling points

№	Heavy metals	MNS 6148:2010 standard	Borehole -89 (Area of subterranean exit)	Lake	Borehole -90 (Eastern part area of the lake)
1	Chromium (Cr)	0.07	0.09	0.3	0.2
2	Lead (Pb)	0.05	0.32	0.5	0.4
3	Cadmium (Cd)	0.003	0	0	0
4	Zinc (Zn)	5	4.57	0.98	7.5
5	Cuprum (Cu)	1	0.01	0.03	0

Table 2. Results of heavy metal analysis of groundwater

13. **Composition III.** A methodology for determining outspread and boundaries of suspended water and disposing of suspended water shall be drafted and work shall be carried out according to this methodology. 66 boreholes down to 15.0 meters deep were drilled and sampled in order to study the outspread and boundaries of suspended water. Including: Respectively 64 soil samples and 20 water samples were taken and analyzed by the professional organization.

(i) *Determining the outspread and boundaries of the suspended water.*

- Within the scope of work to determine the outspread and boundaries of suspended water, 66 boreholes with a depth of down to 15.0 meters were drilled and surveyed, out of which 64 soil samples and 20 water samples were taken and analyzed by relevant professional authorities.
- Water samples taken from the survey area were analyzed by the accredited laboratories of the “Nart SHUUN Consulting” LLC and “Erdem Ireedui” NGO, the results of the chemical and sanitary analysis of the water compared to the wastewater and drinking water standards confirmed that the water distributed in the survey area was “groundwater” of the free surface, originated from the precipitation (Appendix 3).
- The absolute elevation of the survey area is 964.0-962.0 m on average and the slope is geographically located from north to south. Groundwater sources are flowing from Khar Tolgoi (989.8 m), Gurvan Durvulj (976.5 m) and 1000.4 m high altitudes which are located in the east and northwest of Zamyn-Uud soum. The results of the engineering-geological survey show that the outspread of groundwater is aquifers that cover large basins, are fed by precipitation and belong to the category of groundwater that has formed a stable layer. The outspread of this aquifer is at the depth of 6 m to 11 m, depending on the elevation of the surface, with a fixed location from northwest to southeast and the average thickness of the aquifer varies from 2m.

(ii) *Removal and reduction of suspended water.* 85.8% (77.3/90 hectare) or 77.3 hectare of the survey area was found to have groundwater and the area is formed of evenly distributed fine-grained sandy soils (main sediments containing groundwater) with a thickness of 4m-10m. Beneath the fine-grained sandy soils, Paleogene from light green to reddish clay soils spread, forming a waterproof layer that allowed groundwater to be accumulated and formed.

- The aquifer is located on the Paleogene from light green to reddish clay soils, which are directly related to the thinning, thickening and loss of soil water due to soil folds, slopes, up and down and elevations.
- According to the terms of reference of survey work, “Mintoryes” LLC was instructed to remove and reduce “suspended water” (as previously considered), but detailed geological survey by Mintoryes LLC reached a conclusion that this water is not suspended water but soil water, so there is no possibility to remove or reduce.

**B. CS-01: Detailed Engineering Design firm for Civil Works for Zamyn-Uud Free zone**

14. “Songolt Design” LLC won the bid for the selection of detailed engineering design construction company for Zamyn-Uud free zone within the scope of CS-01 lot and signed a contract on March 29, 2022. The goal of the consulting service of the Detailed engineering

design is to draft the design drawing and bidding documents required for infrastructure, roads, engineering lines, landscaping of public ownership site improvement, construction and procurement of goods for the first phase development of the ZUFZ. The Detailed Engineering Design drafting work of the infrastructure of the ZUFZ, a Gateway facility and the solid waste recycling center will consist of the following three parts. Including: (i) Development of detailed engineering design of infrastructure of the 1st phase of ZUFZ. (ii) Development of detailed engineering design for the construction of Gateway facility and the solid waste recycling center for the first phase of ZUFZ. (iii) Carrying out Detailed Environmental impact assessment (DEIA) at the ZUFZ. As of June 2022, "Songolt Design" LLC is drafting its beginning report and presenting it to the executing and implementing agencies.

### **C. Grievance redress mechanism and public consultation**

15. GRM. According to the provision#10 of attachment No.4 to the Loan contract of DECZP, Complaints and Appeals Resolution Board has developed a work guidance, resolution structure and organization and got approved by ODPM on April 12, 2022. (Appendix 2)

16. Public consultation. **CS-01.** Work beginning meeting ZU-01 to develop Detailed Engineering Design of Gateway facility construction of inland exit checkpoint, first phase infrastructure of Zamyn-Uud free zone was conducted with "Songolt Design" company, which was selected to develop detailed engineering design at the Construction Development Center on April 6, 2022 and exchanged opinions with Project implementing and executing agencies.

### **D. Training and capacity building**

- (i) Between 28-29 March 2022, ADB organized training on ADB Safeguard Policy and Involuntary Resettlement. From PIU, a monitoring and evaluation specialist, environment safeguard specialist, and social development and gender specialist attended the training. Training topics were:
  - ADB Safeguards Policy Statement and Involuntary Resettlement
  - Involuntary Resettlement in Project Cycle, Safeguards Documents: Preparation, Updating, Implementation, and Monitoring
  - Informal Settlers and Involuntary Resettlement Issues
  - Negotiated Settlements, Voluntary Donation, and Voluntary Land Swapping
- (ii) The Project Coordinator, Social development and gender specialist, environmental safeguards specialist and head of the social development policy department of the Governor's administration office of Zamyn-Uud soum participated in the training on "ADB-supported project grievance redress mechanism", organized by the project special coordinator's office (PSCO) and resident mission of ADB in Mongolia between 22-24<sup>th</sup> May 2022. Goal of the training is: (i) to improve the procedure of the project grievance redress mechanism and (ii) to provide the ADB staffs and partner governmental executing and implementing agencies with the knowledge to properly communicate with the affected citizens and stakeholders and correctly resolve & arrange the accepted complaints.

### III. ENVIRONMENTAL MANAGEMENT DURING THE REPORTING PERIOD

17. Developing the economic cooperation zone project is being implemented in the pre-construction stage for the EMP implementation. Including: (i) key responsibilities for environmental management; (ii) implementation of the project mitigation measures; (iii) implementation of the project monitoring program; (iv) public consultations and grievance redress mechanism; (v) training and capacity building; (vi) environmental supervision and reporting; (vii) assessment of project readiness; (viii) compliance of the environmental implementation with the terms of the project loan contract.

#### A. Assessment of project readiness

18. An assessment of project readiness was conducted between January of March 2022, before the start of project civil works. The assessment was conducted by the PIU Environment consultant. The indicators that were assessed are presented in Table 3. These indicators include whether: (i) the EMP mitigation measures have been incorporated in the detailed design; and (ii) the PIUs have included project-specific clauses for environment safeguards to be incorporated in the bidding documents.

Table 3. Project readiness assessment

Indicator	Assessment Target	Target Achieved
EMP update	EMP was updated after technical detail design & approved by ADB	The update will be required after the completion of the Detailed engineering design. "Songolt Design" LLC signed a contract in March 2022 and is developing the detailed engineering design.
EMP translation and disclosure	EMP was translated into the local language and distributed to IAs, design institutes, PIU	Distributed to IAs, design institutes, PIU.
Compliance with loan assurances	The borrower complies with loan assurances related to project design and environmental management planning	In compliance. (Appendix 1)
Public involvement effectiveness	Meaningful consultation completed	It will be executed after the renewal of the EMP.
	GRM established with entry points	GRC was established on April 12, 2022 and got approved by the ODPM
Environmental supervision in place	EC is in place	The EC signed a contract in 2021
	Propose to the governmental agencies in Zamyn-Uud soum about carrying out an external monitoring and examination	It will be executed after the renewal of the EMP
	Construction Contractor should employ an environmental protection specialist or supervision engineer	Not yet due. It shall be described and confirmed in the contractor's contract during the construction phase.
Bidding documents and contracts with environmental safeguards	Bidding documents and contracts incorporating the environmental activities and safeguards listed as loan assurances	Not yet due. It shall be described and confirmed in the contractor's contract during the construction phase.
	Bidding documents and contracts incorporating the impact mitigation and environmental management provisions of the EMP	Not yet due. It shall be described and confirmed in the contractor's contract during the construction phase.

Indicator	Assessment Target	Target Achieved
	Environmental requirements of EMP included in contract documents for construction contracts	Not yet due. It will be executed after the renewal of the EMP
EMP financial support	The required funds have been set aside for EMP implementation	Not yet due. After updating the EMP, the costs of implementing the EMP shall be clarified and verified.

## B. Key responsibilities for environmental management

19. The main responsibilities for environmental management during the pre-construction, construction and operation stages of the project are summarized in Table 4.

Table 4. Key responsibilities for environmental management

Phase	Main parties	Main responsibilities for environmental management	Implementation status (From January to June 2022)
Pre-construction	ODPM	Overall coordination and responsibility for the project	Working as being 100 percent responsible for the project management and implementation.
		Ensure ZUFZGO/MCUD conduct GEIA for ZUFZ and obtain domestic clearance and approval promptly	Is implementing.
		Formation of Project Steering Committee to advise implementing agency and PIU for monitoring	The steering committee of the project has been established.
		Timely recruitment and establishment of the Project Implementing Unit (PIU)	The Project implementation unit has been established.
	MCUD	Overall responsibility for the management of project-related construction	Detailed Engineering Design firm is being controlled.
		Check environmental applications submitted to MET and environmental clearance obtained from MET before construction of the facilities	Not yet due. It will be executed after the renewal of the EMP.
		Ensure that tender and contract documents for construction include the requirement to follow recommendations of the IEE and EMP	Not yet due. It shall be described and confirmed in the contractor's contract during the construction phase.
		Ensure that sufficient funds and PIU are available to properly implement all agreed environmental safeguards monitoring measures	Not yet due. After updating the EMP, the costs of implementing the EMP shall be clarified and verified.

**C. Compliance of the environmental implementation with the terms of the project loan contract**

20. Under the Agreement, entered into by and between Mongolia and ADB on July 02, 2020, the Borrower, through the Project Contractor, shall be bound with the following for the preparation, design, implementation, operation, closing and construction of the Project. These include: (i) Procurement; (ii) Environment; and (iii) Land Acquisition and Involuntary Resettlement and Indigenous Peoples; (iv) Human and Financial Resources to Implement Safeguards Requirements, and (v) Safeguards-Related Provisions in Bidding Documents and Works Contracts; (vi) Safeguards Monitoring and Reporting; (vii) Prohibited List of Investments; (viii) Grievance and Redress Mechanism; (ix) Labour Standards, Health and Safety; (x) Operational/Sector Performance Covenants (Appendix 1).

**D. Environmental supervision and Reporting**

21. Environmental supervision (PIU). The PIU has been implementing the EMP in stages and monitoring the terms of the loan agreement and the EMP (Table 3, Appendix 1).

**Reporting**

- (i) The Environmental Monitoring Annual Report 2021 was developed and sent to ADB, ODPM, and ZUFZGO, MOF, MCUD.
- (ii) The Environmental Safeguard Progress Report 2022 for Q1 was developed and sent to ADB, ODPM and ZUFZGO, MOF on April 2022.



#### IV. CONCLUSIONS AND NEXT STEPS

##### A. CONCLUSIONS

22. As at 27 June 2022,

- (i) The project implementation process is being monitored by the implementing and executing agencies.
- (ii) “Mintoryes” LLC conducted a survey on soil pollution and water sampling between the periods from October 03 to November 26, 2021. The goal of this survey is to perform some operation according to the processed methods which is to eliminate/ reduce soil pollution, determine the boundar and spread of suspended water in the “Zamyn-Uud” free zone in Zamyn-Uud soum, Dornogovi province. The operation results of soil pollution, suspended water spreading and boundaries were presented to the Implementing and executing agencies during the reporting period of the monitoring and the following results are made:
  - (a) Detailed soil pollution survey was conducted between the periods from October to November 2021 in the northern part of “Zamyn-Uud” Free Zone and in the southern part of Zamyn-Uud soum and reached the following conclusion. Including: Soil pollution has been considered at three levels according to the spread of soils in the survey area. (i) Has solid waste: According to the chemical analysis, soil with solid contaminants have an average humus content of 0.37%, indicating very low fertility, no salinity and moderate nutrient content. (ii) Liquid contaminants: According to the chemical analysis, the average of humus content of the soil with liquid contaminants is 0.47%, which is very low in nutrients and low in nutrients. (iii) Sandy soil: According to the chemical analysis, sandy soils have an average humus content of 0.40%, which indicates that the fertility is very low, unsalted, moderately supplied with nutrients and has a weakly alkaline soil environment.
  - (b) Pollution card where wastewater of household of Zamyn-Uud soum won’t belong to the project implementation area. But, the “Mintoryes” LLC will belong to the analysis work field. There are 6 pollution cards and they contain liquid pollutants (wastewater) and solid waste (landfill waste disposal and earth piles). The following recommendations were suggested. (i) Clean the open dumping and spilled waste, (ii) Remove the waste disposal, level or transport them to the site and dump them in landfills or specially licensed areas (iii) and calculate the costs in detailed involved in both of the above recommendations.
  - (c) Laboratory tests were approved that it was transferring from light green to reddish-brown hard-coated clay soils with loose bumps throughout the survey area.
  - (d) The survey area is located in the 6-magnitude seismic zone.
  - (e) It is required to concrete in order to protect the foundations of buildings and structures from the rain and snow.
  - (f) Compaction is recommended if the foundation of the building is excavated below the depth, as planned in the design drawing.
  - (g) The groundwater may increase by 50-80 cm from the current level due to other factors, so the foundation and wall structure of the underground passage should be covered with waterproof liquid glass and special materials. This is because the groundwater in the area is highly mineralized and corrosive, so waterproofing materials should be used in conjunction with the chemical composition of the water.



- (h) Measures should be taken to protect from the physical and geological phenomena of the wind and drifting on the trails of the 1st, 2nd and 3rd lanes of the road.
- (i) The results of the water quality tests showed that it was free of bacteria and germs and the chemical composition of the water was determined to be groundwater, not suspended water.
- (j) The results of the water quality analysis showed that it was free of bacteria and germs and the chemical composition of the water determined that it was groundwater, not a suspended water. Within the scope of this activity, the analysis revealed that there is "Groundwater" and not "Suspended water" in the area of 1.3 km wide and 1.5 km long or approximately 2.0 km<sup>2</sup> area. Preliminary pumping was carried out and water spurting out was determined.
- (k) Also, the results of analysis, carried out in soil and water may also change due to climatic change and natural phenomena.

23. The EMP, which was posted in the website of ADB and drafted in the IEE has been translated and presented to ODPM and ZUFZGO, MOF.

## **B. NEXT STEPS**

24. EMP and GRM Capacity Building Training. The training covers (i) the pre-construction (ii) construction and (iii) operational phases. The training content will include changes to the Environmental Management Plan, GRM, environmental impact and mitigation measures, monitoring, and changes to the Environmental Management Plan related to the construction and operation phases. Training will commence after the Environmental Management Plan is updated.

25. Training will be provided mainly by the environment consultant of the PIU and for construction, jointly by supervision engineers.

26. According to the project detailed operational plan, a DEIA will be conducted in 2022. The scope of the DEIA will cover the planned 300 hectare of new infrastructure, passage buildings & facilities and the infrastructure planning area to be connected vertically to the AN-3 road from the ZUFZ exit to the 300 hectare area, prescribed in the Partial Master Plan of the ZUFZ.

27. The grievance redress mechanism has the below listed functions. Including: (i) a feedback box shall be placed at the Governor's Administration Office of Zamyn-Uud soum and the project site of ZUFZ. (ii) acceptable complaints, lodged from the project stakeholders shall be reviewed and documented; (iii) early resolution of grievances; (iv) the chosen mechanism and/or action shall be informed to the complainant or (v) the number of complaints received and resolved; (vi) the measures taken; and (vii) summary report shall be prepared on the final outcome of the grievance and submitted to the ADB, the implementing and executing agencies on a regular basis and on request.

## V. APPENDIX

### APPENDIX 1. COMPLIANCE WITH ENVIRONMENTAL ASSURANCES

This appendix lists the environmental safeguard assurances for the project and the status of compliance with these assurances during the reporting period.

Assurance	Page/Section Reference	Status of Compliance
<b>SCHEDULE 4 – Procurement</b>	Page 16	
The Borrower, through the Project Executing Agency, shall not award any Works contract which involves environmental impacts until: (a) the Ministry of Environment and Tourism has granted the final approval of the IEE; and (b) the Borrower has incorporated the relevant provisions from the EMP into the Works contract.	Section 2	(a) Being complied with. (b) An opinion concerning the EMP has been described in the terms of reference of the Detailed engineering design in the 1st quarter of 2022
<b>SCHEDULE 4 – Environment</b>	Page 16	
The Borrower, through the Project Executing Agency, shall ensure that the preparation, design, construction, implementation, operation and decommissioning of the Project and all Project facilities comply with (a) all applicable laws and regulations of the Borrower relating to the environment, health and safety; (b) the Environmental Safeguards; and (c) all measures and requirements outlined in the IEE, the EMP, and any corrective or preventative actions (i) outlined in a Safeguards Monitoring Report; or (ii) which are subsequently agreed between ADB and the Borrower. In case of any discrepancy or inconsistency among the applicable laws and regulations of the Borrower relating to the environment, health and safety and the SPS, the SPS shall prevail.	Section 4	Being complied with. (a) Project activity is being implemented within the scope of the legislations of Mongolia. (b,c) All measures and requirements, set forth in the IEE and the Environmental Management Plan have been met and prepared according to the SPS of the ADB and the progress report of the 1 <sup>st</sup> quarter of 2022 was presented to the implementing and executing agencies in April.
<b>SCHEDULE 4 – Land Acquisition and Involuntary Resettlement and Indigenous Peoples</b>	Page 17	
The Borrower, through the Project Executing Agency, shall ensure that the Project does not have any indigenous peoples or involuntary resettlement impacts, all within the meaning of the SPS. If the Project does have any such impact, the Borrower, through the Project Executing Agency, shall take all steps required to ensure that the Project complies with the applicable laws and regulations of the Borrower and with the SPS.	Section 5	Being complied with. (i) The project area where infrastructure and facilities will be constructed or installed are within the government-owned lands. (ii) Between 28-29 March 2022, ADB organized training on ADB Safeguard Policy and Involuntary Resettlement. From PIU, Monitoring and evaluation specialist, Environment Safeguard Specialist, Social Development and Gender specialist attended the training.
<b>SCHEDULE 4 – Human and Financial Resources to Implement Safeguards Requirements</b>	Page 17	

Assurance	Page/Section Reference	Status of Compliance
The Borrower, through the Project Executing Agency, shall make available necessary budgetary and human resources to fully implement the EMP and the GAP.	Section 6	Being complied with. Environment Safeguard Specialist and Social Development and Gender Specialist had been recruited and are on duty.
<b>SCHEDULE 4 – Safeguards-Related Provisions in Bidding Documents and Works Contracts</b>	Page 18	
<p>The Borrower, through the Project Executing Agency, shall ensure that all bidding documents and contracts for Works contain provisions that require contractors to:</p> <ul style="list-style-type: none"> <li>(a) comply with the measures relevant to the contractor outlined in the IEE and the EMP (to the extent they concern impacts on the respective affected people under the Environmental Safeguards during construction), and any corrective or preventative actions outlined in (i) a Safeguards Monitoring Report; or (ii) subsequently agreed between ADB and the Borrower;</li> <li>(b) make available a budget for all such environmental and social measures;</li> <li>(c) provide the Borrower with written notice of any unanticipated environmental, resettlement or indigenous peoples risks or impacts that arise during construction, implementation or operation of the Project that was not considered in the IEE and the EMP;</li> <li>(d) adequately record the condition of roads, agricultural land and other infrastructure before starting to transport materials and construction; and</li> <li>(e) reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.</li> </ul>	Section 7	Not yet due. Will observe in the construction work phase.
<b>SCHEDULE 4 – Safeguards Monitoring and Reporting</b>	Page 18	
<p>The Borrower, through the Project Executing Agency, shall do the following:</p> <ul style="list-style-type: none"> <li>(a) submit Safeguards Monitoring Reports to ADB in respect of the implementation of and compliance with Environmental Safeguards and the EMP, semiannually during construction and the implementation of the Project and the EMP until the issuance of ADB's Project completion report unless a longer period is agreed in the EMP, and disclose relevant information from such reports to the respective affected people under the Environmental Safeguards, promptly upon submission;</li> </ul>	Section 8	<p>Being complied with. (a) A progress report on environmental safeguards and the implementation of the Environmental Management Plan was submitted to the ADB in April 2022.</p> <p>(b) EMP will be updated and submitted to the ADB after DEIA applicable to the CS-01 package is completed. (c) Implementation of EMP is being followed.</p>

Assurance	Page/Section Reference	Status of Compliance
<p>(b) if any unanticipated environmental and/or social risks and impacts arise during the construction and operation phase of the project that was not considered in the IEE and the EMP, promptly inform ADB of the occurrence of such risks or impacts, with a detailed description of the event and proposed corrective action plan; and</p> <p>(c) report any actual or potential breach of compliance with the measures and requirements outlined in the EMP promptly after becoming aware of the breach.</p>		
<b>SCHEDULE 4 – Prohibited List of Investments</b>	Page 19	
The Borrower shall ensure that no proceeds of the Loan are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the SPS.	Section 9	Being complied with.
<b>SCHEDULE 4 – Grievance and Redress Mechanism</b>	Page 19	
The Borrower, through the Project Executing Agency, shall ensure that a safeguards grievance redress mechanism acceptable to ADB is established following the provisions of the IEE and the EMP at the PIU, within the timeframe specified in the IEE and the EMP, to consider safeguards complaints.	Section 10	The composition and terms of reference of the Grievance redress committee were drafted and approved by the ODPM on April 12, 2022 (Appendix 2).
The grievance redress mechanism shall function to (a) review and document eligible complaints of Project stakeholders; (b) proactively address grievances; (c) provide the complainants with notice of the chosen mechanism and/or action; and (d) prepare and make available to ADB upon request periodic reports to summarize (i) the number of complaints received and resolved; (ii) chosen actions; and (iii) outcomes of the grievances and make these reports available to ADB upon request.	Section 11	Not yet due. The composition of the grievance redress committee and terms of reference were developed by the implementing and executing agencies and approved by the ODPM.
<b>SCHEDULE 4 – Labour Standards, Health and Safety</b>	Page 19	
The Borrower shall ensure that the core labour standards and the Borrower's applicable laws and regulations are complied with during Project implementation. The Borrower, through the Project Executing Agency, shall include specific provisions in the bidding documents and contracts financed by ADB under the Project requiring that the contractors to, among other things: (a) comply with the Borrower's applicable labour law and regulations and incorporate applicable workplace occupational safety norms; (b) do not use child labour; (c) do not discriminate workers in respect of employment and occupation; (d) do not use forced labour; (e) allow freedom of association and effectively recognize the right to collective bargaining; (f) do not delay any lawful payment to the workers; and (g) disseminate, or engage appropriate service providers to disseminate,	Section 12	Being complied with. It is described in the activities of EMP and GAP.

Assurance	Page/Section Reference	Status of Compliance
information on the risks of sexually transmitted diseases, including HIV/AIDS, to the employees of contractors engaged under the Project and to members of the local communities surrounding the Project area, particularly women.		
<b>SCHEDULE 4 – Operational/Sector Performance Covenants</b>	Page 20	
The Borrower shall cause the Mongolia Customs General Administration, the General Agency for Specialized Inspection and the Ministry of Environment and Tourism to establish an effective monitoring system, before Project completion, to minimize potential opportunities for traffickers to exploit the ZUFZ for illegal timber trade and wildlife trafficking.	Section 20	Not yet due. Will observe in the construction work phase.

## APPENDIX 2. GRC AND GUIDANCE OF THE COUNCIL



# МОНГОЛ УЛС ШАДАР САЙДЫН ТУШААЛ

20<sup>᠒᠒</sup> оны ᠐4 дугаар  
сарын 1᠘ -ны өдөр

Дугаар 36

Улаанбаатар  
хот

Өргөдөл, гомдлыг шийдвэрлэх зөвлөлийн  
бүрэлдэхүүн, ажлын удирдамж  
батлах тухай

Монгол Улс болон Азийн хөгжлийн банк хооронд байгуулсан "Эдийн засгийн хамтын ажиллагааны бүс хөгжүүлэх төсөл" /Л3936-МОН/-ийн зээлийн хэлэлцээрийн 4 дүгээр хавсралтын 10 дахь хэсгийг үндэслэн ТУШААХ нь:

1. Азийн хөгжлийн банкны санхүүжилтээр хэрэгжиж буй "Эдийн засгийн хамтын ажиллагааны бүс хөгжүүлэх төсөл"-ийн үйл ажиллагаатай холбоотой өргөдөл, гомдлыг шийдвэрлэх чиг үүрэг бүхий зөвлөлийн бүрэлдэхүүнийг нэгдүгээр, ажлын удирдамжийг хоёрдугаар хавсралтаар тус тус баталсугай.

2. Энэхүү тушаалын хэрэгжилтэд хяналт тавьж ажиллахыг Төслийн удирдах хорооны дарга, Шадар сайдын ахлах зөвлөх бөгөөд Ажлын албаны дарга Ц.Уртнасанд даалгасугай.

Монгол Улсын Шадар сайд



С.АМАРСАЙХАН

## APPENDIX 3. TEST RESULT FOR DETERMINING SOIL WATER

Курловын томъёо

$$\frac{\text{Cl}48.8\text{SO}^4_431.7\text{HCO}_319.5}{\text{M}_{2,0}} \text{Na}77.2 \text{Mg}14.6$$

Дүгнэлт

Хлорид-сульфат ангийн,натрийн бүлгийн II төрлийн найрлагатай саармаг орчинтой,нилээд эрдэсжилттэй хатуулаг ус болохын хамт бохирдолтыг тодорхойлогч нэгдлүүд бараг илрээгүй байна.Энэхүү уст цэгийн усанд гадны хаягдал усны нөлөөлөл байхгүй,тухайн орчны хөрсний ус байх үндэстэй.

Шинжилгээ хийж дүгнэлт бичсэн:

Химич .....Г.Туваанжав

ЭРДЭН  
ИРЭЭДҮЭ  
ХАМТЛАГ