

Environmental Monitoring Report

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Semestral Report (January–June 2024)

October 2024

Kyrgyz Republic: Issyk-Kul Wastewater Management Project

Prepared by the State Institution “Drinking Water Supply and Sewerage Development” under the Water Resources Service under the Ministry of the Water Resources, Agriculture and Processing Industry of the Kyrgyz Republic in consortium with Temelsu International Engineering Inc., Design and Supervision Consultant for the Asian Development Bank (ADB).

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Abbreviations

ADB	:	Asian Development Bank
APS	:	Architecture and Planning Specifications
APU/ETU	:	Russian acronym for Architectural and Technical Approval
BOD ₅	:	Biological Oxygen Demand (5 day)
BOQ	:	Bills of Quantity
BV	:	Balykchy Vodokanal
COD	:	Chemical Oxygen Demand
CabMin KR	:	Cabinet of Ministers of the Kyrgyz Republic
SIDWSSD	:	State Institution Drinking Water Supply and Sewerage Development under the Water Resources Service under the Ministry of Water Resources, Agriculture and Processing Industry of the Kyrgyz Republic
DSC	:	Design and Supervision Consultant
EA	:	Executing Agency
EHS	:	Environment, Health and Safety
EMP	:	Environmental Management Plan
ETS	:	Engineering and Technical Specifications
ICB	:	International Competitive Bidding
IEE	:	Initial Environmental Examination
IFC	:	International Finance Corporation
ISDP	:	Issyk-Kul Sustainable Development Project
ITA	:	Issyk-Kul Territorial Administration
IWMP	:	Issyk-Kul Wastewater Management Project
KVK	:	Karakol Vodokanal
LARP	:	Land Acquisition and Resettlement Plan
MNRETS	:	Ministry of Natural Resources, Ecology and Technical Supervision of Kyrgyz Republic
NTP	:	Notice to Commence
OOS	:	Russian acronym for Environment Protection
OVOS	:	Russian acronym for “Assessment of Environmental Impacts”
PIU	:	Project Implementation Unit
PMO	:	Project Management Office
PRGKRIKO	:	Permanent Representative of the President of the Kyrgyz Republic in Issyk-Kul Region
SAACHCS	:	State Agency for Architecture, Construction, Housing and Communal Services under the Cabinet of the Kyrgyz Republic
SAEMR	:	Semi - Annual Environmental Monitoring Report

SSEMP	:	Site-Specific Environmental Management Plan
SNiP	:	Russian acronym for Construction Codes and Regulations
SPZ	:	Sanitary Protection Zone
WSS	:	Water supply and sanitation
WWTP	:	Wastewater Treatment Plant

Units and Currencies

°C	degree Celsius
ha	hectare
km	kilometres
m ³	cubic meters
m ³ /d	cubic meter per day
mg/l	milligram per litre
Mg/Ol	milligram Oxygen per liter
MLD	million liter per day
US \$	United States Dollar

Executive Summary

1. **Project Background.** The objective of the Issyk-Kul Wastewater Management Project is to improve wastewater services in two lakeshore cities on Issyk-Kul lake, in the eastern region of the Kyrgyz Republic. It will upgrade and expand the existing wastewater systems, build institutional capacity, and strengthen the sustainability of the water supply and sanitation (WSS) utilities in Balykchy and Karakol. As per the ADB Safeguard Policy Statement (SPS) 2009, this project was classified as environmental category “B”. Based on the construction activities, this project was divided into various subprojects namely

- Construction of a Sewerage Network in Balykchy- (Contract No. W1 Lot 1)
- Construction of a Sewerage Network in Balykchy- (Contract No. W1 Lot 2):
- Construction for Expansion of Sewer Network in Karakol - (Contract No. W2 Lot 1)
- Construction for Expansion of Sewer Network in Karakol – (Contract No. W2 Lot 2)
- Pump Station and Rising Main 1.7km in Karakol (Contract No. W2)
- Construction of Karakol Waste Water Treatment Plant (WWTP) (Contract No. W3)
- Construction of Balykchy Waste Water Treatment Plant (WWTP) (Contract No. W4)

2. The executive agency is “The Department of Drinking Water Supply and Sewerage Development under the Cabinet of the Kyrgyz Republic” and project implementing agency is “Office of the Plenipotentiary Representative of the President of the Kyrgyz Republic in the Issyk-Kul region, Mayor’s Office and Vodokanal of Balykchy and Karakol cities”. Temelsu International Engineering Inc. has been contracted by DDWSSD as Design and Supervision Consultant (DSC) for the implementation of this project.

3. **Design approval status.**

- i. **Sewerage Network:** Detailed design for all the four sewerage network packages has been finalised and approved before commencement of the construction works.
 - Contract No. W1 Lot 1: Construction of a Sewerage Network in Balykchy
 - Contract No. W1 Lot 2: Construction of a Sewerage Network in Balykchy
 - Contract No. W2 Lot 1: Construction for Expansion of Sewer Network in Karakol
 - Contract No. W2 Lot 2: Construction for Expansion of Sewer Network in Karakol
- ii. **Pump station and Waste Water Treatment Plants (WWTPs):**
 - Contract No. W2 (Pump Station and Rising Main 1.7 km in Karakol): For the Pump station proposed at Karakol the design is finalized and it is in tender stage
 - Contract No. W3 (Construction of Karakol Waste Water Treatment Plant (WWTP)): For Karakol WWTP, the concept design has been finalized and approved, however, the detailed design is planned to be submitted in three stages namely (i) 1st stage shall have design details for Administrative building, workshop, guard room and fencing, (ii) 2nd stage shall have design details for Aeration Tank and Sedimentation Tank and (iii) 3rd stage shall have rest of the structure details (including heating system). Contractor has submitted the English translation of 1st and 2nd stage of detailed designs on 19th June 2024. DSC has given comments and approval for Administration and workshop building with the condition that Contractor may continue works complying with the comments. Also, for the second stage of documents DSC informed that there are no additional comments. The rest of the structures forming the third group and were submitted to State Expertise on 7th June 2024.

- Contract No. W4 (Construction of Balykchy Waste Water Treatment Plant (WWTP)): Detail design for the Balykchy WWTP has been finalised and approved before commencement of the construction works.

4. **EMP in Contract agreement.** Except Pump station package (which is in the tender stage), ADB cleared EMP is included in the contract agreement for all the packages. However, based on the site inspection by the PMO, PIU and DSC (for impacts that are not included in the EMP) additional mitigation/ management measures will be suggested.

Contract(s) Awarded

Name of Package	Description	Name of Contractor
Construction of a Sewerage Network in Balykchy- (Contract No. W1 Lot 1)	This contract works include construction of 5.34 km sewerage network in Western part of Balykchy and includes the following streets: <ul style="list-style-type: none"> • Togolok Moldo street • Mambetaliev street • Ozyornaya Street 	LLC Impuls -Osh
Construction of a Sewerage Network in Balykchy- (Contract No. W1 Lot 2):	Contents of this contract consists of construction of 5.32 km sewerage network in Eastern part of Balykchy in the following streets: <ul style="list-style-type: none"> • Toktosunov street • Sharipov street • Kaldybaev street. 	Profit Express Ltd.
Construction for Expansion of Sewer Network in Karakol - (Contract No. W2 Lot 1)	Total length of 6.71 km of sewerage network will be constructed under this contract in the Southern part of Karakol in the following sites: <ul style="list-style-type: none"> • Akhunbaeva Street from Lenin street to Moskovskaya Street • Duisheeva street from Dzhusayev street to Moskovskaya street • Moskovskayaa Street from Akhunbaev Street to Oktyabrskaya Street 	LLC ME "MINUR"
Construction for Expansion of Sewer Network in Karakol – (Contract No. W2 Lot 2)	This contract contains construction of 5.94 km sewerage network at the North side of Karakol at the following sites <ul style="list-style-type: none"> • Oktyabrskaya Street from Gebze Street to Kuchukov Street • Dzhusayev Street from Przhevalsky Street to Shorukov Street 	Consortium of Inzhenernaya Zashchita Ltd. and Polymer Snab Asia Ltd.
Pump Station ¹ and Rising Main 1.7km in Karakol (Contract No. W2)	This item consists of SPS-4 Pump Station in Pristan, sewerage collector from SPS 4 –SPS 2, 200 m Pressure	Tender stage

¹ Detail design is completed and submitted to State Expertise for approval in April and approval was received on 05.06.2023

Name of Package	Description	Name of Contractor
	Line crossing Karakol River and reconstruction of 28 manholes	
Construction of Karakol Waste Water Treatment Plant (WWTP) (Contract No. W3)	Wastewater Treatment plant with the capacity of 12,000 m ³ /day will be constructed on "Design & Build" contract.	Joint Venture HAYAT GROUP LLC and BLOWWORKS Verfahrenstechnik GmbH
Construction of Balykchy Waste Water Treatment Plant (WWTP) (Contract No. W4)	Wastewater Treatment plant with the capacity of average 4,200 m ³ /day will be constructed on "Design & Build" bases.	CCCC Tianjin Dredging Co., Ltd, China Road and Bridge Corporation and China Northeast Municipal Engineering Design and Research Institute Co.

Unanticipated Impacts including Change of Scope or Design

- i. There are no changes in the sewerage networks scope or design, all four packages (W1 Lot 1, W1 Lot 2, W2 Lot 1 and W2 Lot 2) on the sewerage networks construction works are completed.
- ii. Both the WWTP packages are on the Design-Build contract.
 - For Balykchy WWTP: The contractor has shared the design and got it approved by the DSC. However, in the later stages of the construction, it was decided to have mechanical sludge dewatering facility instead of sludge drying beds, accordingly the IEE has been updated and disclosed on May 2024.
 - Karakol WWTP: The contractor has shared the concept design and got it approved. As indicated earlier in the executive summary, 1st and 2nd stage detailed design has been submitted to DSC/PIU/PMO, based on the comments and suggestions, the construction of Administration and workshop buildings are in progress (no changes of scope and design). If there any changes in the design or in the scope, unanticipated impacts shall be assessed and accordingly the IEE shall be revised
- iii. For Karakol Pump station the design has been approved, bid document are completed and it is in the tender stage.

Environmental Safeguards Implementation Status

5. All four sewer network packages W1 (Lot 1 and lot 2 in Balykchy) and W2 (Lot 1 and Lot 2 in Karakol) has been completed and Project Completion Certificate (PCC) has been issued on 10th August 2023 for Balykchy packages and 28th November 2023 for Karakol packages. Post Construction Environmental Audit Report for sewerage networks proposed at Balykchy and Karakol has been completed and disclosed in April 2024 (ADB website) by including it as an annexure to the SAEMR (July to December 2023). During the construction period, the EHS requirements as per the approved SSEMP was adopted by all the contractors to the satisfaction of the Engineer (DSC).

6. For Pump Station and Rising Main 1.7 km in Karakol (Contract No. W2), based on the comments received from the PMO, the IEE document was revised/ updated and submitted to ADB on 18th December 2023, after ADB review, the IEE report was disclosed in the ADB website in April 2024.

7. Construction of Karakol WWTP (Contract No. W3) was initiated on May 2024 after obtaining necessary clearances from the state expertise and ADB. Initial trainings on the safeguards to be adopted in the construction site was given by the DSC to the contractor. Environmental monitoring

was conducted by the MNRETS and the outcomes of the results for both the air quality and noise levels are well within the stipulated limits. Further trainings on the EHS to be conducted by the Contractor to the labours, environmental monitoring to be performed in the site as per the monitoring plan and other EMP requirements (including the Odour monitoring and water quality monitoring) shall be monitored and will be detailed in the subsequent SAEMR.

8. Construction of Balykchy WWTP (Package W4) was completed and the contractor requested the PCC on 30th June 2024, accordingly after WWTP site inspection by the DSC have issues the PCC on 13th July 2024, the details of the same will be elaborated in the subsequent SAEMR. During the construction period, the EHS requirements as per the approved SSEMP was adopted by all the contractor to the satisfaction of the Engineer (DSC)

9. **Site Inspections and Audits.** During this reporting period between January to June 2024, the DSC's Environmental specialist visited Balykchy and Karakol project sites on 25th to 26th February 2024 (with ADB Mission Team), 14th April 2024, 16th to 17th May 2024, 30th to 31st May 2024, 13th to 14th June 2024 to monitor the works of the Contractors. A total of 16 NC's (including major and minor NCs) are observed in the project sites (Balykchy and Karakol) of which 12 NCs are closed and 4 remains open. The status of the open NC's will be discussed in the subsequent SAEMR.

10. **Grievances status.** The Initiative Group of Geolog Village submitted the letter to ADB KYRM on 15 April 2024. The PMO jointly with the Executing and Implementing agencies thoroughly reviewed and discussed the letter and gave a comprehensive response.

11. **Environmental Monitoring.** The construction works for the sewerage network at Balykchy and Karakol (Contract # W1 Lot 1 and Lot 2 (Balykchy), W2 Lot 1 and Lot 2 (Karakol)) were completed and project completion certificates were issued. Hence the environmental monitoring for air quality has not been conducted. For WWTP at Balykchy (Contract # W4) the construction works (including all civil works) are almost on the verge of completion and hence the contractor (China Road and Bridge Corporation) has not conducted the air quality monitoring. For Karakol WWTP the Department of Monitoring under the MNRETS measured air quality (sulphur dioxide, nitrogen, carbon monoxide, and suspended solids) and the Health Laboratory of Karakol Inter district Center of Disease Prevention and State Sanitary Epidemiological Surveillance under KR MoH measured Noise levels. The recorded values for all the air quality parameters and Noise levels are well within the stipulated standards.

1 INTRODUCTION

1.1 Introduction

12. This report is the 9th Semi-Annual Environmental Monitoring Report (SAEMR) for the Issyk-Kul Wastewater Management Project (the Project)². It covers the Project activities between the period of 01st January, 2024 and 30th June, 2024.

1.2 Headline Information

13. In order to secure sustainable and reliable wastewater treatment services in Balykchy city and Karakol city, the existing sewerage networks will be improved, and expanded (new connections will be added) and the existing abandoned wastewater treatment plants (WWTPs) will be replaced with new WWTPs (with higher capacity and modern technology) constructed at Balykchy city and Karakol city. Project is expected to achieve the following outputs:

- i. Balykchy and Karakol wastewater systems improved.
- ii. Improved capacity of “Vodokanals”
- iii. Septage management services improved and sanitation and hygiene awareness increased.

14. At present, the total coverage of households with sewage network is at a low level, i.e. only 35% in Balykchy city and 45% in Karakol city. In this regard, the Project focuses on sewage treatment facilities, expansion of sewerage networks, considering the connection of an additional 850 households in Balykchy city and 1200 households in Karakol city. The implementation of this activity will increase the coverage rate to an estimated 45% in Balykchy and 60% in Karakol.

15. **Environment category.** The Project has been classified as environmental category “B” according to ADB Safeguard Policy Statement (SPS) 2009, the impacts of the subproject were assessed in the Initial Environmental Examination (IEE). The project envisages temporary environmental impacts during the construction phase mainly due to dust, noise, vibration, solid waste and movement of construction equipment, as well as obstructed traffic. These impacts can be controlled, minimized and mitigated.

16. During the reporting period within the framework of the Project:

A. Balykchy City

- **Construction of a Sewerage Network in Balykchy - Contract No. - W1 Lot 1 (Contractor: Impulse Osh Ltd)**. The Contractor has completed the works within the scope of the Contract including additional works. The lines and all the manholes are checked and tested by DSC, PIU and Vodokanal Representatives, following those inspections, the Contractor applied for issuance of Completion Certificate on

² Please note, the word “Project” indicates “IWMP” in this SAEMR report

21st July 2023 and Completion Certificate has been issued by DSC on 10th August 2023.

- **Construction of a Sewerage Network in Balykchy - Contract No. W1 Lot 2 (Contractor: Profit Express Ltd).** The Contractor has completed the works within the scope of the Contract including additional works. The lines and all the manholes are checked and tested by DSC, PIU and Balykchy Vodokanal representatives. .
- **Construction of Balykchy Waste Water Treatment Plant (WWTP) - Contract No. W4 (Contractor: CCCC Tianjin Dredging Co., Ltd, China Road and Bridge Corporation and China Northeast Municipal Engineering Design and Research Institute Co., Ltd Joint Venture (Lead by China Road and Bridge Corporation)).**
 - In discussion with PMO/PIU and DSC, the contractor has replaced the sludge drying beds (as per the approved design) with mechanical sludge dewatering facility, accordingly the IEE has been updated and disclosed on May 2024.
 - The Contractor has completed the works within the scope of the Contract and requested for the Project Completion Certificate on 30th June 2024..

B. Karakol City:

- **Construction for Expansion of Sewer Network in Karakol - Contract No. W2 Lot 1 (Contractor: Minur Ltd).** The Contractor has completed the works within the scope of the Contract including additional works. The lines and all the manholes are checked and tested by DSC, PIU and Karakol Vodokanal representatives, clarifying that observed defects had been repaired and removed by the Contractor. The Completion Certificate has been issued by DSC on 28th November 2023.
- **Construction for Expansion of Sewer Network in Karakol – Contract No. W2 Lot 2 (Contractor: Inzhenernaya Zashchita Ltd. and Polymer Snab Asia Ltd).** The Contractor has completed the works within the scope of the Contract including additional works. The lines and all the manholes are checked and tested by DSC, PIU and Vodokanal representatives, clarifying that observed defects had been repaired and removed by the Contractor. The Completion Certificate has been issued by DSC on 28th November 2023.
- **Replacement of 200 m of discharge pipeline from Karakol WWTP to the irrigation pond of Ak-Suu DDWR, construction of 50 m3 wastewater tank in Pristan-Przhevalsk and rehabilitation of 28 manholes of the main collector to Karakol WWTP, Contract No. W2.** .

- Conceptual design has been submitted to APU/ ETU approval on 17th March 2023 and approval received on 19th April 2023.
 - Detail design is completed and submitted to State Expertise for approval in April, 2023 and approval was received on 05th June 2023.
 - IEE (Initial Environmental Examination for Karakol SPS-4 and additional works) has been prepared and submitted to PMO on 24th April 2023 and on 22nd May 2023 updated according to the comments of PMO and submitted. The document was submitted to ADB on 18th December 2023. The IEE was approved and disclosed on ADB website in April 2024.
 - Bidding documents are completed and tendered by PIU, bid opening date was declared as 22nd December 2023. However, no Bid proposals have been received by the PIU. Therefore, it was retendered on 26th December 2023 the deadline being 26th January 2024 but no proposals has been received. It was again retendered on 23rd May 2024 and got no response from any of the contractors.
- **Construction of Karakol Waste Water Treatment Plant (WWTP) - Contract No. W3, (Contractor: HAYAT Group LLC and BIOWORKS Verfahrenstechnik GmbH).**
 - IEE for the Karakol WWTP has been finalized based on the Conclusion of the State Environmental Expertise on the design for the construction of WWTP in Karakol of Issyk-Kul regional department of MNRETS dated 28.02.2024 №01-10/1064 and in discussion with the Contractor, PIU, PMO and ADB safeguard experts and disclosed the approved IEE on March 2024.
 - Based on the approval of the SSEMP³ (shared by the contractor with PMO), the contractor initiated the construction work on 6th May 2024 (refer Annexure 9). The key activities include mobilization works, demolishing works, excavation works, dismantling and demolishing of existing aeration tanks, laying temporary power line, laying lean concrete layer for guard house, warehouse.

³ The International Environmental Specialist of the Karakol WWTP Contractor developed an SSEMP for the Karakol WWTP based on the ADB-approved IEE. However, during the SSEMP's subsequent review and approval, the DSC's comments were not incorporated, and prolonged correspondence between the Contractor and the DSC delayed the start of construction works at the Karakol WWTP. To address this issue and avoid further delays, the EA, upon the request of the IA PMO, approved the SSEMP after prior coordination of the draft Russian version with the DSC, Vodokanal, and Karakol PIU. This approval was granted on the condition that the SSEMP would be revised by the Contractor during the course of construction works. Currently, in response to comments from the ADB Safeguard Mission (November 4–8, 2024), the Contractor has begun updating the SSEMP. The PMO has committed to submitting the final English and Russian versions by the end of December 2024, as agreed. In the meantime, all construction activities at the site have been suspended.

2 PROJECT DESCRIPTION AND CURRENT ACTIVITIES

2.1 Project Description

17. The Issyk-Kul Wastewater Management Project is aimed to maintain the sensitive ecosystem balance of Issyk-Kul Lake, improve and expand access to reliable, sustainable and affordable sewerage services in Balykchy and Karakol, and provides the construction and expansion of existing wastewater treatment systems, strengthening institutional capacity and increasing the sustainability of water supply and sanitation services (WSS) in Balykchy and Karakol. The project outcomes should ensure

- (i) Improved sewerage and wastewater treatment systems in the cities of Balykchy and Karakol,
- (ii) Strengthened institutional capacity of Vodokanal Municipal Enterprises in the cities of Balykchy and Karakol, and
- (iii) Improved septic sludge management and sanitation.

18. This Project will increase access to potable water and safe sanitation services, including use of proven technologies for treatment and disposal of solid and liquid waste in the cities of Balykchy and Karakol and includes three components;

- Component (A): Wastewater Treatment and collection
- Component (B): Enhancing Vodokanals institutional and service-oriented capacity;
- Component (C): Improve awareness for public health implications and wastewater management in Balykchy and Karakol



Figure 2-1: Location of Project Towns of Balykchy and Karakol

a) Balykchy Sewerage Network Extension:

19. Currently, 4156 households and 106 commercial/industrial/institutional/tourism organizations are connected to the sewerage system in Balykchy. The existing sewerage network consists of 64 km of non-pressure sewers built in the 1970s and currently serves about 40% of the population. The Project will provide 10.6 km of sewer networks on six streets, which will connect about 4015 additional households (55%) to the sewer network.

b) Karakol Sewerage Network Extension:

20. About 38% of all households in Karakol are connected to the sewage system, most of which live in multi-story buildings. Currently, about 25,000 people (7,301 households) use services of a centralized sewage system. The length of the sewerage network of the city is approximately 110 km. In addition, the municipal enterprise “Karakol Vodokanal” provides sewerage services to 38 budget organizations, 251 commercial enterprises and 1 industrial enterprise. the project will provide 12.7 km of sewer networks on six streets, which will connect about 3,248 additional households (55%) to the sewer network.

c) Construction of a Pump Station (PS – 4) at Pristan, Karakol city:

21. In addition to the non-pressure sewerage system in Karakol, the village of Pristan (TSU No. 8) is served by a gravity-pressure combined system. This system includes 4 pump stations, 3 of which were rehabilitated under the first phase of Issyk-Kul Sustainable Development Project (IKSDP). The fourth sewage pump station is located in close proximity to Issyk-Kul Lake and is in a semi-ruined non-operating stating. Based on loads resulted from wastewater volume, the technical solutions for SPS No.4 in Karakol City are adopted as 2 phases of construction:

- The following structures are considered for Phase 1 of construction.
 - The receiving reservoir is a steel wastewater tank with a storage capacity of up to 50 m³.
 - Site for placement of a reservoir with an area of 1350 m² with perimeter fencing along the guard zone and vehicle access.
 - Sewage trucks with a tank volume of 16 m³ to transport out sewage.
- The following structures are considered for Phase 2 of construction.
 - Sewage Pump station with two submersible pumps (one - operating, one - standby). The capacity is 30 m³ /h, head is 35 m. The pumps will work in turns in the order determined by an automatic control system.
 - Pump station is supplied as a package, it includes (i) Fiberglass receiving tank, (ii) Submersible pumps, (iii) Pump control panel and (iv) Pavilion above the pump station with an approximate dimension of 2.5x2.5 m.
 - Emergency reservoir in metal structures with an effective volume of up to 50 m³.
 - Pressure collector for a length is 2.9 km shall be installed underground. At intersection with Karakol river, the collector will be installed in a case with D_u+350 mm, which is placed inside one-span metal truss. A special manhole with discharge valve will be installed at the lower part of collector for dewatering of the collector lower part.
 - On-site power supply networks with the installation of own transformer 25 kVA. Power load is 22 kW.
 - Pump station site with an area of 1350 m² with vehicle access and fencing along the perimeter.

d) Balykchy WWTP Reconstruction

22. The Balykchy Sewage Treatment Plant is designed and will be built to cope with 4200 m³/d incoming wastewater. Process includes mechanical treatment stage comprising coarse screen, fine screen and grit removal units, biological treatment and sludge drying. Biological treatment unit is an integrated sewage treatment tank designed for the Project, which consists of the modified A20 biochemical tank, sludge pump tank, secondary sedimentation tank and secondary lift pump tank.

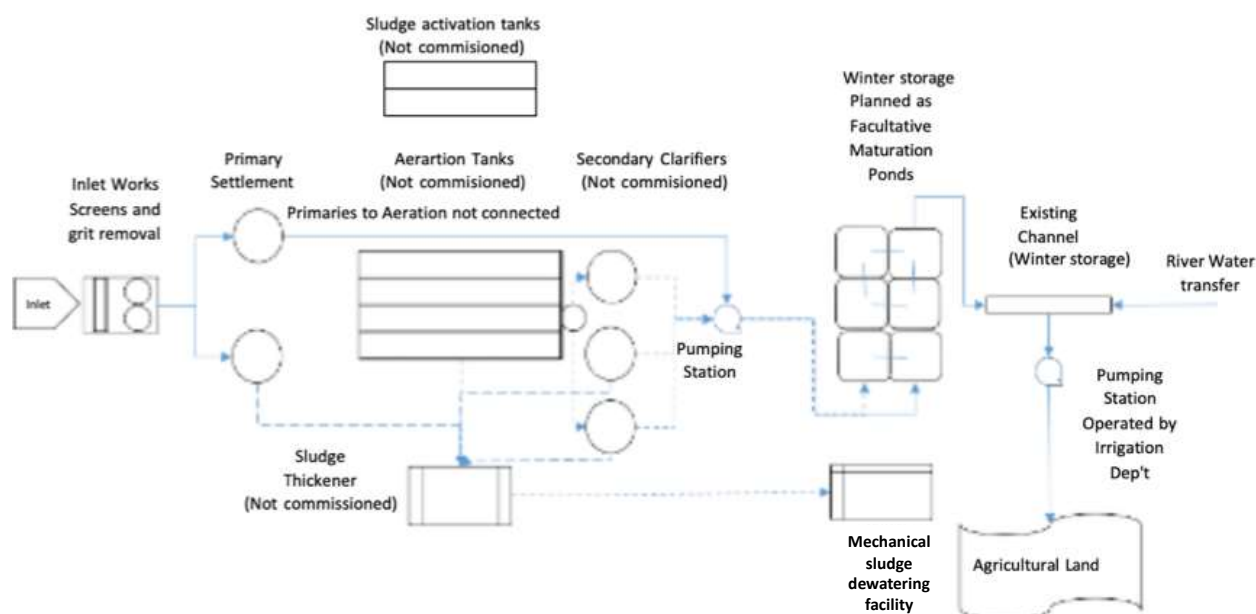


Figure 2-2: Schematic Illustration of Balykchy WWTP Process

e) Karakol WWTP Reconstruction

23. The existing wastewater treatment plant is located in the northern suburb of the city and was constructed in 1980. Currently, the actual quantity of influent wastewater received by WWTP has not been measured, however, according to estimates of the Karakol Vodokanal (KVK), the average existing flow is 7,500 m³/day with the influent flow of about 6,000 m³/day in the winter and 12,000 m³/day in the summer. New Karakol WWTP will be designed and constructed according to the project implementation method “design and construction”.

2.2 Project Contracts and Management

24. A list of main organizations involved in the project and relating to Environmental Safeguards is given Table 2-1 and illustrated at Figure 2-3. It includes names of experts from Project Management Office, Design and Supervision Consultants and Contractors.

Table 2-1: Environmental Safeguards of the Project

Borrower	Ministry of Finance of the Kyrgyz Republic
Executive Agency	Issyk-Kul Wastewater Management Project under Department of Drinking Water Supply and Sewerage Development

Project Management Office (PMO)	
PMO Environmental Officer	Mr. Kylychbek Sheralievich Zhundubaev
e-mail:	environmental@IWMP.kg
Tel:	+ 996 507 22 06 68
Design and Supervision Consultant (DSC)	
Organization:	Temelsu International Engineering Services Inc
DSC International Environmental Safeguard Specialist	K. Pushpanathan
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Tel:	+91 9382315901
DSC National Environmental Specialist:	Mrs. Olga Zinina (part time basis)
e-mail:	zinola@yandex.ru
Tel:	+996555475577
Contractors	
Impulse-Osh Ltd.	Contractor for Lot-1 in Balykchy
Chief Engineer	B. Latikhanov
e-mail:	impuls_osh@mail.ru
Tel:	+996778566565
Quality Engineer	Bekmamat Japiev
e-mail:	impuls_osh@mail.ru
Tel:	+996558060623
Health, Safety & Environment Staff	Bekmamat Japiev
e-mail:	impuls_osh@mail.ru
Tel:	+996556032121
Profit Express Ltd.	Contractor for Lot-2 in Balykchy.
Chief Engineer	Urmat Beishenaliev
e-mail:	Urmat_beishenaliev1983@mail.ru
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Quality Engineer (or other position)	Aman Akunov
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Tel:	+996709501117
Health, Safety & Environment Staff	Anvar Mamytov
e-mail:	profit-express@mail.ru
Tel:	+996312973075
Minur Ltd.	Contractor for Lot-1 in Karakol
Site supervisor	Samatbek Kaldybaevich Jakypbekov
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Tel:	+996702649633
Foreman	Kanatbek Toktogonovich Mamyrbayev

e-mail:	minur2007@mail.ru
Tel:	+996702255118
Health, Safety & Environment Staff	Bekzat Shergazievich Dadybaev
e-mail:	dadybaev.b@mail.ru
Tel:	+996700376283
Consortium of Inzhenernaya Zashchita Ltd and Polymer Snab Ltd.	Contractor for Lot-2 in Karakol
Project Manager	M. Ikramov
e-mail:	injen_z@mail.ru
Tel:	+996556 566 665
Foreman	B. N. Kozhomkulov
e-mail:	injen_z@mail.ru
Tel:	
Health, Safety & Environment Staff	Bakyt Urmanbetov
e-mail:	Urmanbetov.b.kg@mail.com
Tel:	+996508080300
Consortium of Contractor CCCC Tianjin Dredging Co., Ltd, China Road and Bridge Corporation and China Northeast Municipal Engineering Design and Research Institute Co., Ltd Joint Venture	Contractor for Balykchy WWTP
Project Manager	Yu Zhiping (+996770445355)
Chief Civil Engineer	Beishenbai Zhanboev (+996504100125)
Health and Safety Staff	Yuan Anfeng (+996774415210)
Surveyor	Feng Longlong (+996508425999)
Construction Engineer	Chen Jian (+996507118520)
Environmental Engineer	Saparbek Sagynov (+996707785378), sapar-82kg@mail.ru

25. The following organizations and/or staff responsible for environmental monitoring and/or supervision during the design and construction:

- a. **PMO Environmental Specialist.** To carry out overall coordination in implementing the SEMP, monitoring and control to ensure Contractors' compliance with the norms and requirements of the national environmental legislation, the ADB's Safeguards Policy Statement and prepare analytical documents and reports.
- b. **International and National Environmental Safeguard Specialists of DSC.** To assist the PMO Environmental Officer in coordinating and overseeing design, construction supervision and monitoring activities under the project based on the contract. To undertake the technical oversight for the delivery of all safeguard measures, ensures that SEMP mitigation and monitoring measures implemented, and compliance reporting completed.

- c. **Contractor's environmental managers and/or Health, Safety and Environmental officers.** Responsible for preparation and implementation of SEMP. EHS officers of Contractors carry out the activities stipulated in SEMP, monitoring and control to ensure Contractors' compliance with the norms and requirements of national environmental legislation and ADB Safeguards Policy.
- d. Authorized state bodies and their territorial divisions:
- (i) State Agency of Architecture, Construction and Housing and Communal Services under the Cabinet of Ministers of the Kyrgyz Republic (SAACCHS),
 - (ii) State Institution Drinking Water Supply and Sewerage Development under the Water Resources Service under the Ministry of Water Resources, Agriculture and Processing Industry of the Kyrgyz Republic (SIDWSSD),
 - (iii) Project Implementation Units in Karakol and Balykchy (PIUs),
 - (iv) Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic (MNRETS),
 - (v) Department for Disease Prevention and State Sanitary and Epidemiological Control and the Karakol Inter district Centre for Disease Prevention and State Sanitary and Epidemiological Control under the Ministry of Health KR (MoH),
 - (vi) Ministry of Culture, Information, Sports and Youth Policy (MCISYP),
 - (vii) Ministry of Emergency Situations (MES), Ministry of Agriculture (MOA) and others.

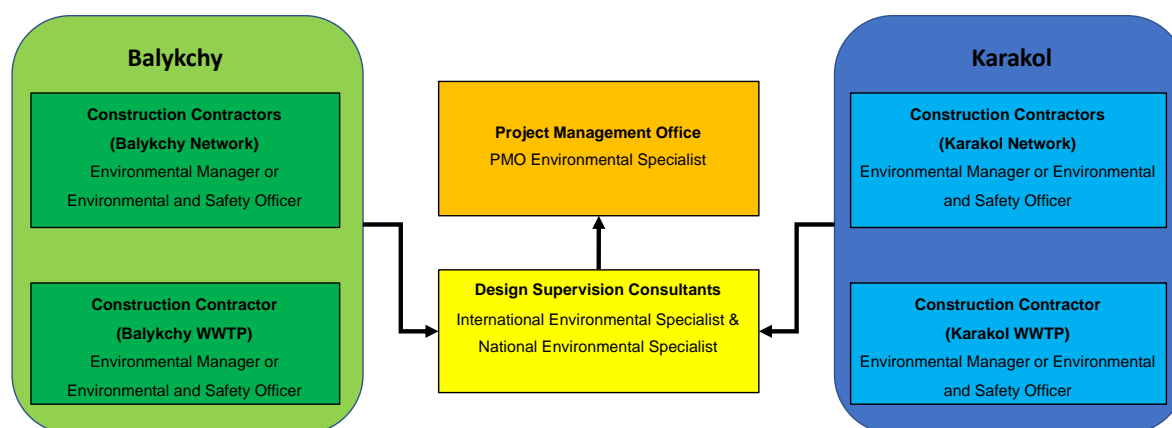


Figure 2-3: Organogram of Environmental Safeguards of the Project

2.3 Project Activities during Current Reporting Period

Contract Package Number and Works Title	W1 Lot 1: Construction of Extension of Balykchy Sewerage Network, "Western"
Work Progress	This package has been completed and the Completion Certificate was issued by DSC on 10 th August 2023 (Refer Annexure 1).

	However, as a part of the contract agreement, the Defect Liability Period (DLP) is in progress.
--	---

Contract Package Number and Works Title	W1 Lot 2: Construction for Expansion of Sewer Network in Balykchy, "Eastern"
Work Progress	This package has been completed and the Completion Certificate has been issued by DSC on 10 th August 2023 (Refer Annexure 1). However, as a part of the agreement, the Defect Liability Period (DLP) is in progress.

Contract Package Number and Works Title	W2 Lot 1: Construction for Expansion of sewer network in Karakol, Lot 1: "Southern"
Work Progress	This package has been completed and the Completion Certificate has been issued by DSC on 28 th November 2023 (Refer Annexure 1). However, as a part of the agreement, the Defect Liability Period (DLP) is in progress.

Contract Package Number and Works Title	W2 Lot 2: Construction for Expansion of sewer network in Karakol, Lot 2: "North"
Work Progress	This package has been completed and the Completion Certificate has been issued by DSC on 28 th November 2023 (Refer Annexure 1). However, as a part of the agreement, the Defect Liability Period (DLP) is in progress.

Contract Package Number and Works Title	W2: Pump Station and Rising Main 1.7km in Karakol
Work Progress	<p>Design Works:</p> <ul style="list-style-type: none"> • Conceptual design has been submitted to APU/ ETU approval on 17.03.2023 and approval received on 19.04.2023. • Detail design is completed and submitted to State Expertise for approval in April, 2023 and approval was received on June, 2023. • Comments received from ADB on the IEE (Initial Environmental Examination for Karakol SPS-4 and additional works) has been addressed and the revised IEE along with compliance matrix was submitted to PMO for further submission to ADB (shared on 18th December 2023).

	<ul style="list-style-type: none"> • OVOS was prepared and submitted to PMO on 02.06.2023. Public consultations were held for which a Positive conclusion was issued on 07.02.2023 by the MNRETS. • Bidding documents are completed and tendered by PIU, bid opening date was scheduled for 22nd December 2023. However, no Bid proposals have been received by the PIU. Therefore, it was decided to retendered on 26th December 2023 with a deadline being 26th January 2024 but again no proposals were received. The PIU will retender it again.
--	---

Contract Package Number and Works Title	W3: Procurement of Plant Design, Supply and Installation of WWTP in Karakol
Work Progress	<ul style="list-style-type: none"> • The IEE report for the Karakol WWTP has been finalized based on the Conclusion of the State Environmental Expertise on the design for the construction of WWTP in Karakol of Issyk-Kul regional department of MNRETS dated 28.02.2024 №01-10/1064 and in discussion with the Contractor, PIU, PMO and ADB safeguard experts and disclosed the approved IEE on March 2024. • Based on the approval of the SSEMP (shared by the Contractor with PMO), the contractor initiated the construction work on 6th May 2024. The key activities at the initial stage of the construction include mobilization works, demolishing works, excavation works, dismantling and demolishing of existing aeration tanks, laying temporary powerline, laying lean concrete layer for guard house, and warehouse.





3. Project Information Board – May 2024



4. Demolishing works – May 2024



5. Administration Building – June 2024



6. Excavation of sedimentation Tank – June 2024

**Contract Package
Number and Works Title**

W4: Design and Build WWTP Balykchy

Work Progress

- The Contractor has completed the works within the scope of the Contract and requested for the Project Completion Certificate on 30th June 2024.



1. Painting works – February 2024



2. Workers with PPE's – February 2024



3. Plastering works – March 2024



4. Pipeline laying works – March 2024



5. Asphalting the road – May 2024



6. Aeration Pipes in Biological Tank – May 2024

2.4 Description of Any Changes to Project Design

26. In discussion with PMO/PIU and DSC, the contractor has replaced the sludge drying beds (as per the approved design) with mechanical sludge dewatering facility, accordingly the IEE has been updated and disclosed on ADB website on May 2024.

2.5 Description of Any Changes to Agreed Construction methods

27. There is no change in the construction methods.

3 ENVIRONMENTAL SAFEGUARD ACTIVITIES

3.1. General Description of Environmental Safeguard Activities

3.1.1 Expansion of Sewer Network in Balykchy and Karakol

28. All four sewer network packages W1 (Lot 1 and lot 2 in Balykchy) and W2 (Lot 1 and Lot 2 in Karakol) were completed and project completion certificate was issued on 10th August 2023 for Balykchy packages and 28th November 2023 for Karakol packages. The Post Construction Environmental Audit Report for sewerage networks proposed at Balykchy and Karakol has been disclosed in ADB website in April 2024. Hence no environmental safeguard activities has been conducted.

3.1.2 Construction of Balykchy WWTP

29. Construction of Biological tank, Sedimentation tank, Inlet regulatory tank, Screening buildings, Blow air and boiler rooms, UV disinfection room and mechanical workshop were completed. Excavation of trenches for the utility lines, and Road construction within the facility works were carried out during the reporting period. During the construction, Environmental specialist of the contractor performs the following activities (Refer **Annexure 2** - Reports on Monitoring of the Contractors):

- Check the availability of PPE, first aid kit, sanitizer before the start of works;
- Fill in check lists for monitoring of environmental impact;
- Monitors the need for dust suppression;
- Fencing of construction site with appropriate warning tapes
- Supervises the proper condition of rooms for the accommodation of workers, the availability of good hygienic and living conditions for which the contractor was given an NCN and corrective action plan was instructed;
- Supervises the implementation / utilization of safety and environmental measures/means, the SEMP.

3.1.3 Construction of Karakol WWTP

30. The IEE has been updated and received No Objection from ADB and obtained conclusion of the State Environmental Expertise on the design for the construction of WWTP in Karakol of Issyk-Kul regional department of MNRETS dated 28.02.2024 №01-10/1064. The updated SSEMP has been approved by PMO thus the Contractor was notified on 26th April 2024 to commence works at site. The Contractor commenced the works at site on 6th May 2024. The contractor have obtained necessary clearances/ permission from the competent authority as a part of the pre-construction stage activity as indicated in the SSEMP/ disclosed IEE (refer table . The key construction activities include mobilization works, demolishing works, excavation works, dismantling and demolishing of existing aeration tanks, laying temporary powerline, laying lean concrete layer for guard house and warehouse. The contractor has been suggested to adopt the environmental monitoring plan for conducting environmental monitoring (air, noise and water) surrounding the project site. It is also suggested to conduct EHS training for the labours and contractors key site staffs, the information on the same shall be shared in the forthcoming SAEMR (July to December 2024).

Table 3-1: Permits and approvals obtained by the Contractor prior to commencement of construction works at the Karakol WWTP№	Name of document	Date of issue	Issued by
1	Waste disposal permit	No. 000321 dated 28.11.2023 for waste disposal in the environment, reg. No. 246,	Issyk-Kul Regional Office of MNRETS. In coordination with the Mayor's office of Karakol city the place of construction waste removal is determined
2	Permit for disposal of construction waste	No. 000159 dated 31.05.2024 for waste disposal in the environment, reg. No. 155,	Issyk-Kul Regional Office of MNRETS. In coordination with the Mayor's office of Karakol city the place of construction waste removal is determined
3	Contract for construction waste removal services	dated 5.11.2023.	Karakol Complex of Landscape improvement and Sanitary Cleaning
4	Contract for domestic solid waste removal services	dated 01.09.2023	Karakol Complex of Landscape improvement and Sanitary Cleaning
5	Positive conclusion of the state ecological expertise on the SPZ design for Karakol WWTP	dated 11.09.2023	Issyk-Kul Regional Office of MNRETS.
6.	Positive conclusion of the state ecological expertise for WWTP construction design	№ 01- 10/1064 dated 28.02.2024	Issyk-Kul Regional Office of MNRETS
7.	Contract for water supply including technical water	June 2024	ME Karakol Vodokanal
8	Wastewater contract	June 2024	ME Karakol Vodokanal
9	Contract for sampling and chemical analysis of water	№ 6 dated 08.08.2023 год.	Issyk-Kul Regional Administration of MNRETS during IEA preparation, IEE updating and pre- construction environmental monitoring

Table 3-1: Permits and approvals obtained by the Contractor prior to commencement of construction works at the Karakol WWTP№	Name of document	Date of issue	Issued by
10	Contract for sampling and chemical analysis of soil	dated 08.08.2023.	Issyk-Kul Regional Administration of MNRETS during IEA preparation, IEE updating and pre-construction environmental monitoring
11	Contract for noise and vibration laboratory tests	№ 81 dated August 7, 2023	Karakol Interdistrict Center for Disease Prevention and State Sanitary and Epidemiological Surveillance of the Ministry of Health of the Kyrgyz Republic
12	Contract for archaeological expertise on historical and cultural heritage sites in the construction area	May 19, 2023	Ministry of Culture of the Kyrgyz Republic Conclusion on the absence of historical and cultural heritage sites, Ministry of Culture of KR (№04-6/4904 from 08.06.2023)
13	Architectural and urban-planning conclusion for WWTP construction Karakol City	№ 06-29/43 dated 04.08.2023	Karakol Architecture Department
14	Positive conclusion of state expertise	dated March 14, 2024	Gosstroy Register No. 00-1-1-14-E-24

3.1.4 Update of the Initial Environmental Evaluation for Pristan – Przhevalsk.

31. IEE (Initial Environmental Examination for Karakol SPS-4 and additional works) has been prepared and submitted to PMO on 24th April 2023 and on 22nd May 2023 updated according to the comments of PMO and submitted. The document was submitted to ADB on 18th December 2023. The IEE was approved and disclosed on ADB website in April 2024.

32. Bidding documents are completed and tendered by PIU, bid opening date was scheduled for 22nd December 2023. However, no bid proposals were received by the PIU. Therefore, it was decided to be retendered on 26th December 2023 with a deadline being 26th January 2024 but again no proposals were received. The PIU. have retendered the bidding document on 23rd May 2024, again there is no response from any of the contractors.

3.2. Site Audits

33. The construction sites are audited by DSC National and International Environmental Specialists to check the compliance with measures specified in the SEMP (refer **Annexure 3** for site

photos). DSC's Environmental specialist visited Balykchy and Karakol project sites on 25th to 26th February 2024 (with ADB Mission Team), 14th March 2024 (along with International environmental specialist), 16th to 17th May 2024, 30th to 31st May 2024, 13th to 14th June 2024 to monitor the works of the Contractors. In general, most of the EMP mitigation measures are complied by the contractors. However, there are few observations where it needs area of improvement, which are noted and details of the WWTP site visits and findings of non-compliance are presented in **Table 3-2**.

Table 3-2: Audit of sites (Non-Compliances Tracking)

(i)	Scope of Audit	:	EMP Compliance Monitoring in the Project construction sites
(ii)	Auditor	:	Ms.O.V.Zinina (DSC's National Environmental Specialist)
(iii)	Auditees	:	Mr. Saparbek Sagynov (EHS for Package W3) Ms. Karakol Anara Bulharova (EHS for package W4)

No	Site/ Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NC N No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
1	WWTP Balykchy	26.02.24	Safety	open manholes;	Cover all manholes	N39	Minor	04.03.24	Medium	EHS Engineer	Closed	15.03.24
2		26.02.24	Other	debris on the site	Clean the entire construction site		Minor	04.03.24	Low	EHS Engineer	Closed	15.03.24
3		26.02.24	Other	There is no full-time Environmental Specialist on the site	Appoint an environmental specialist		Major	04.03.24	Medium	Project Manager	Closed	04.04.24
4	WWTP Balykchy	14.03.24	Safety	There is no railing on the scaffolding	Install a net	N40	Minor	18.03.24	Medium	EHS Engineer	Closed	05.04.24
5	WWTP Balykchy	29.03.24	Safety	Workers do not use PPE	Conduct training and constant monitoring by a safety and health engineer	N41	Minor	01.04.24	Medium	EHS Engineer	Closed	05.04.24
6		29.03.24	Environment	Incineration of waste on the site	Conduct additional training on EMP		Minor	05.04.24	Medium	EHS Engineer	Closed	05.04.24

No	Site/ Loca tion	Date Reco rded	Categ ory	Descript ion of Issue	Correcti ve Action/s	NC N No	NC Le vel	Due Date	Priorit y	Person Respon sible	Stat us	Dat e Clo sed
					requirem ents							
7		29.03. 24	Safety	There is no fire fighting equipme nt stand at the construct ion site	Install a stand		Ma jor	05.04 .24	Mediu m	EHS Engineer	Clos ed	14.0 4.24
8	WWT P Balyk chy	18.04. 24	Environ ment	Environ mental monitorin g is not carried out. Filling out forms	Environ mental monitorin g to be carried out by the new specialist	N4 2	Mi nor	25.04 .24	Mediu m	Environ mental Specialis t	Clos ed	01.0 5.24
9	WWT P Balyk chy	30.05. 24	Safety	There is no protecti ve fence during high-altitude work	All work at height must be carried out with a guardrail and/or safety belt.	N4 3	Mi nor	01.06 .24	Mediu m	Environ mental Specialis t	Clos ed	03.0 6.24
10	Kara kol WW TP	17.05. 24	Safety	There is no foundatio n pit fencing	Install a fence	N4 4	Mi nor	25.05 .24	Mediu m	EHS Engineer	Clos ed	24.0 5.24
11	Kara kol WW TP	31.05. 24	Other	There is no construct ion site billboard	Install a construct ion site billboard	N4 5	N/ A	07.06 .24	Low	Project Manager	Clos ed	14.0 6.24
12	Balyk chy WWT P	13/06/ 24	Environ ment	Non- collection of wastes in Balykchy	Check with ME Tazalyk to dispose the construct ion waste as soon as possible	N4 6	Mi nor	31/08 /24	Mediu m	Environ mental Specialis t	Ope n	
13	Balyk chy WWT P	13/06/ 24	Environ ment	Non- wearing of facemas ks of workers	PPEs (face mask to be given to the workers entering	N4 7	Mi nor	05/07 /24	Mediu m	Environ mental Specialis t	Ope n	

No	Site/ Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NC N No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
					the screening chamber)							
14	Balykchy WWP	13.06.24	Environment	Garbage on the site	Clean the site.	N46	Minor	18.06.24	Low	Environmental Specialist	Closed	19.06.24
15	Karakol WWP	31/05/24	Other	Inadequate toilet facilities	Separate Toilet facility to be provided for male and female staffs/labours	N49	Minor	31/07/24	Medium	Project Manager	Open	
16	Karakol WWP	31/05/24	Safety	No hard barricades in excavated areas	Hard barricading has to be provided near the excavated areas	N50	Major	05/07/24	Medium	HSE Engineer	Open	

Note: The status of the open NCs will be discussed in the next SAEMR

Snap shots from the Project site (Before and After conforming to noncompliance's)

Noncompliance	Compliance
	
Occupational safety lapses observed, which was barricaded using safety nets	
	
Manholes are observed without covers, which was temporarily covered using plywood	



Construction wastes stored in the project site has been cleared

3.2.1. Issues Tracking (Based on Non-Conformance Notices)

34. During the reporting period, WWTP construction works were ongoing in Balykchy and Karakol. In Balykchy WWTP, the excavation of trenches for the utility lines and road construction within the facility works were carried out. Construction of Karakol WWTP started in 6th May 2024 following ADB's approval of the relevant documents (IEE, EMP and SSEMP). Non-Conformity Tracking Report related to site audits is enclosed in **Annexure 4**. Additionally, the summary of monitoring results are given in the following tables:

Table 3-3: Summary Table

Total Number of Issues for Project	16
Number of Open Issues	4
Number of Closed Issues	12
Percentage by Closed Issues	75%
Issues Opened This Reporting Period	16
Issues Closed This Reporting Period	12
Issues Closed on Time	25%
Percentage by Closed Issues	75%
Percentage by Open Issues	25%
Average Day Open for All Issues	168
Average Day Open for Open Issues	
Average Days to close	168

Table 3-4: Issues by Category

Environmental Protection	5
Social	-
Health	-
Safety	8
Other	3

3.2.2. Trends

35. Comparison of previous and current period Non-compliance issues is given in **Table 3-5**

Table 3-5: Comparison of trends

Semi-Annual Environmental monitoring Reports	Total No of Issues	Issues Closed	Issues closed late		Open issues
			This reporting period	Next reporting period	
5	11	9	-	2	2
6	28	28	4		
7	7	6	3		1
8	18	18	8		
9	16	12	12	4	4

36. As per Table 3-4, the main non-compliances were caused by insufficient arrangements for activities specified in the SSEMP. To reduce the number of non-compliances, additional training on the

measures provided in the SEMP are required not only for the engineering staff, but also for the labours/workers.

37. **Unanticipated Environmental Impacts or Risks.** In the current reporting period (January to June 2024), there are no unanticipated Environmental impacts or risks that have been encountered or identified.

3.2.3. ADB BTOR remarks/ suggestions

38. In the course of site visit by the ADB Safeguards Review Mission on 18th May 2022, around 9 observations/ remarks on the safeguard has been shared with the PMO, of which 7 observations/ remarks has been complied, however 2 (two) of the pending observations/ remarks as indicated in the following table has not been complied, the reasons for non-compliance is shared in the remarks

Table 3-6: Action taken for the ADB Observations (May 2022)

#	Remarks from ADB Mission	Status as of 30.06.2024	Remarks
1.	Instrumental air analysis should be conducted on the days of the most intense construction (days to be agreed with the laboratory).	Not Complied	Contractors have informed that the Department of Monitoring under the MNRETS has no time to conduct the monitoring as they are busy with their routine monitoring works. Moreover, the subprojects on the sewer line network are already completed and during the construction time either DSC or PMO have not received any grievances from the local community on the air quality impacts and hence it is suggested to close the pending NC.
2.	Certificate of conformity should be obtained from Kyrgyz Standard for noise level meter.	Not Complied	The construction activities for the sewer line network packages are completed and the Balykchy WWTP is in the commissioning process, Hence. the use of noise meter is not envisaged at this moment. Hence it ia suggested to close the pending NC.

39. ADB mission 2024 (between February to March 2024) visited Balykchy WWTP and shared their remarks/observations in the BToR. The action taken for the observations are shared in the following table

Table 3-7: Action taken for the ADB Observations (Feb – Mar 2024)

#	Remarks from ADB Mission	Status as of 30.06.2024	Remarks
1.	Construction waste was observed at Balykchy WWTP site.	Not Complied	It was informed by the contractor that the construction waste shall be disposed by the end of August 2024 in the Balykchy Vodokanal identified area.
2.	New constructed wells left opened at Balykchy WWTP site can cause safety issues	Complied	Open wells are closed (refer Annexure 5), action taken report has been submitted by the contractor
3.	High H&S risks for workers during works at height at Balykchy WWTP site	Complied	Appropriate scaffolding has been provided to minimize the risks (refer Annexure 5),

#	Remarks from ADB Mission	Status as of 30.06.2024	Remarks
			action taken report has been submitted by the contractor
4.	Waste management	Being Complied	The waste management is effective within the Balykchy WWTP, however as indicated in the SI.no 1, construction waste disposal needs attention, which shall be disposed at the end of August 2024 in the identified Balykchy Vodokanal area.
5.	Health and safety measures	Being Complied	EHS officer has been appointed and the safety measures as indicated in the SEMP is being complied.
	Other Issues		
6.	IEE for subproject "Construction of receiving tank (50m ³), discharge pipeline (0,2 km) and rehabilitation of the main collector's manholes to WWTP" is not finalized	Complied	IEE report has been finalized and disclosed (April 2024)
7.	IEE for "Design and build of Karakol WWTP" is not finalized	Complied	IEE report has been finalized and disclosed (April 2024)
8.	PCEAR for subproject Balykchy WWTP	Being Complied	PCEAR is being prepared and it will be submitted to the ADB for their review and approval before December 2024.
9.	For subproject "Design and build of WWTP in Karakol" continue a communication plan to keep local communities informed about project progress, potential impacts, and mitigation measures.	Being complied	The Community Liaising Officer (CLO) will be appointed in the PIU in August 2024 (the roles and responsibility of the CLO is detailed in Annexure 8) , who will be in touch with the locals. The contractor EHS officials are also in touch with the local communities.

4 ENVIRONMENTAL MONITORING RESULTS

4.1. Overview of Monitoring Conducted during Current Period

4.1.1. Air Quality

40. The construction works for the sewerage network at Balykchy and Karakol (Contract # W1 Lot 1 and Lot 2 (Balykchy), W2 Lot 1 and Lot 2 (Karakol)) were completed and project completion certificates were issued. Hence the environmental monitoring for air quality has not been conducted.

41. For WWTP at Balykchy (Contract # W4) the construction works (including all civil works) are almost on the verge of completion, and hence the contractor (China Road and Bridge Corporation) has not conducted the air quality monitoring. For WWTP at Karakol (Contract # W3), the environmental monitoring (atmospheric air quality and noise levels) conducted by the Monitoring Department of MNRETS (refer IEE report section 4.4 and 4.5) shall be utilised as baseline data, which shall be compared with the monitoring data during the construction stage to determine the level of impact.

42. As a pre-construction monitoring requirement, the Department of Monitoring under the MNRETS measured air quality (sulphur dioxide, nitrogen, carbon monoxide, and suspended solids) near the biological ponds in January 2024. The outcome of the same is discussed in the following sections.



Figure 4-1: Ambient air quality monitoring locations – Karakol WWTP

43. From the analysis it is evident that the recorded values for all the air quality parameters are well within the stipulated standards (refer **Annexure 6** for AAQ data).

Table 4-1: Air Quality Monitoring Results at Karakol WWTP

No.	Name of tested parameter	Test results by points, mg/m ³			Maximum single MPC, mg/m ³
		Pond # 4	Between Pond # 2 and 3	Pond # 1	
1	Sulphur dioxide	0,185±0,022	0,040±0,005	0,056±0,006	0.5
2	Nitrogen dioxide	0.152±0.027	0.139±0.025	0.154±0.028	0.085
3	Carbon monoxide	0.8±0.16	1.0±0.2	1.5±0.30	5.0
4	Suspended solids	0.158±0.040	0.237±0.059	0.158±0.040	0.5

Source: Department of Monitoring under the MNRETS

4.1.2. Odour Monitoring for Karakol WWTP

44. As per the Sanitary Protection Zone (SPZ) for Karakol WWTP (including the lagoons), which is approved on 11th September 2023 by the head of the Issyk-Kul Regional Department of MENRST, shows the recorded Hydrogen sulfide (H₂S) concentration (0.000631 mg/m³) near the settlement area (Geolog village) is below the WHO air quality guideline for Hydrogen sulfide, which is 150µg/m³ (0.15 mg/m³). However, as per the ADB, the residents from Geolog village have shared complaints regarding the fouling smell (H₂S) arising from the WWTP (including the lagoons), in view of this ADB has requested the PMO to prepare an odour monitoring plan for a continuous air quality monitoring (particularly on H₂S) using portable multi-gas detector (BOSEA version: BSA20180501001).

45. In view of this, the Odour monitoring plan⁴ has been prepared by drafting a suitable monitoring methodology including frequency of monitoring and reporting. This monitoring plan has no relation with the measurement duties for environmental monitoring of the Contractor indicated in the SSEMP and it will be carried on by the Community Liaison Officer (CLO) assigned by the PMO.

4.1.3. Noise Levels

46. Similar to AAQ, baseline information for Noise levels was conducted in September 2023 (refer IEE – Karakol WWTP, section 4.5). As a pre-construction monitoring requirement, the Contractor for Karakol WWTP (Contract # W3) has engaged the Health Laboratory of Karakol Inter district Center of Disease Prevention and State Sanitary Epidemiological Surveillance under KR MoH to measure noise level on WWTP site and in the vicinity of the residential area (the nearest settlement Geolog). The noise level monitoring was conducted on 03rd June 2024. Table 4-2 shows the outcome of the results.

Table 4-2: Recorded Noise levels at Karakol WWTP site

№	Place of Measurement	Nature of noise						Sound pressure levels in dB in octave bands with geometric mean frequencies in Hz									Sound level (dB(A))
		Spectrum		By Time													
	Wide band	Tone	Continuous	Vibrating	Intermittent	Impulse	31.5	63	125	125	500	1000	2000	4000	8000		
1	Construction camp																
		+		+				107	95	87	82	78	75	73	71	69	80 ⁵ MPL
								65.2	59.7	55.9	55	49.7	45.5	45.0	39.6	62.0	62.0
2	Old boiler building																

⁴ The prepared Odour Monitoring plan is in draft stage, upon approval from ADB it shall be included in the SAEMR.

⁵ Resolution of the Kyrgyz Republic № 201 of April 11, 2016. Approval of Public Health Acts (Annexure 14. Sanitary Rules and Regulations "Noise at workplaces, in premises of residential and public buildings and in residential areas")

№	Place of Measurement	Nature of noise						Sound pressure levels in dB in octave bands with geometric mean frequencies in Hz									Sound level (dB(A))
		Spectrum		By Time				31.5	63	125	125	500	1000	2000	4000	8000	
		Wide band	Tone	Continuous	Vibrating	Intermittent	Impulse										
		+		+				107	95	87	82	78	75	73	71	69	80 MPL
								72	70.4	60.2	64.3	65.1	66.0	61.0	58.7	55.8	61.2
3	Construction Site																
		+		+				107	95	87	82	78	75	73	71	69	80 MPL
								71.9	71.7	61.4	51.8	51.8	50.9	47.3	45.7	41.5	66.3
4	Area of construction camp																
		+		+				107	95	87	82	78	75	73	71	69	80 MPL
								53.6	45.8	44.4	39.8	41.9	44.0	39.9	37.1	36.8	60.2
5	Settlement Geolog																
		+		+				107	95	87	82	78	75	73	71	69	80 MPL
								50.9	45.5	42.3	36.3	35.4	36.6	35.4	35.5	36.5	60.1



Figure 4-2: Location of Noise Measurement Points at Karakol WWTP

47. The outcome of laboratory measurements shows that the noise level recorded between 41.5 dB(A) to 71.9 dB(A) in the construction site of the Karakol WWTP. The noise level was 35.4 dB(A) to 50.9 dB(A) in the nearest settlement Geolog that meets the requirements of Annex 14 Sanitary Rules and Regulations "Noise at workplaces, in premises, residential, public buildings and in the residential areas", approved by GR KR # 201 of 11.04.2016.

4.2. Sanitary Protection Zone (SPZ).

48. The capacity of designed WWTP is 12000 m³/day. According to the Sanitary and Epidemiological Rules and regulations "Sanitary protection zones and sanitary classification of enterprises, structures and other facilities" (Government Decree No. 201 dated April 11, 2016), the size of the SPZ for WWTP facilities the size of the SPZ for Karakol WWTP with a design capacity of treatment facilities of more than 5.0 and up to 50 thousand m³/day should be 400 m.

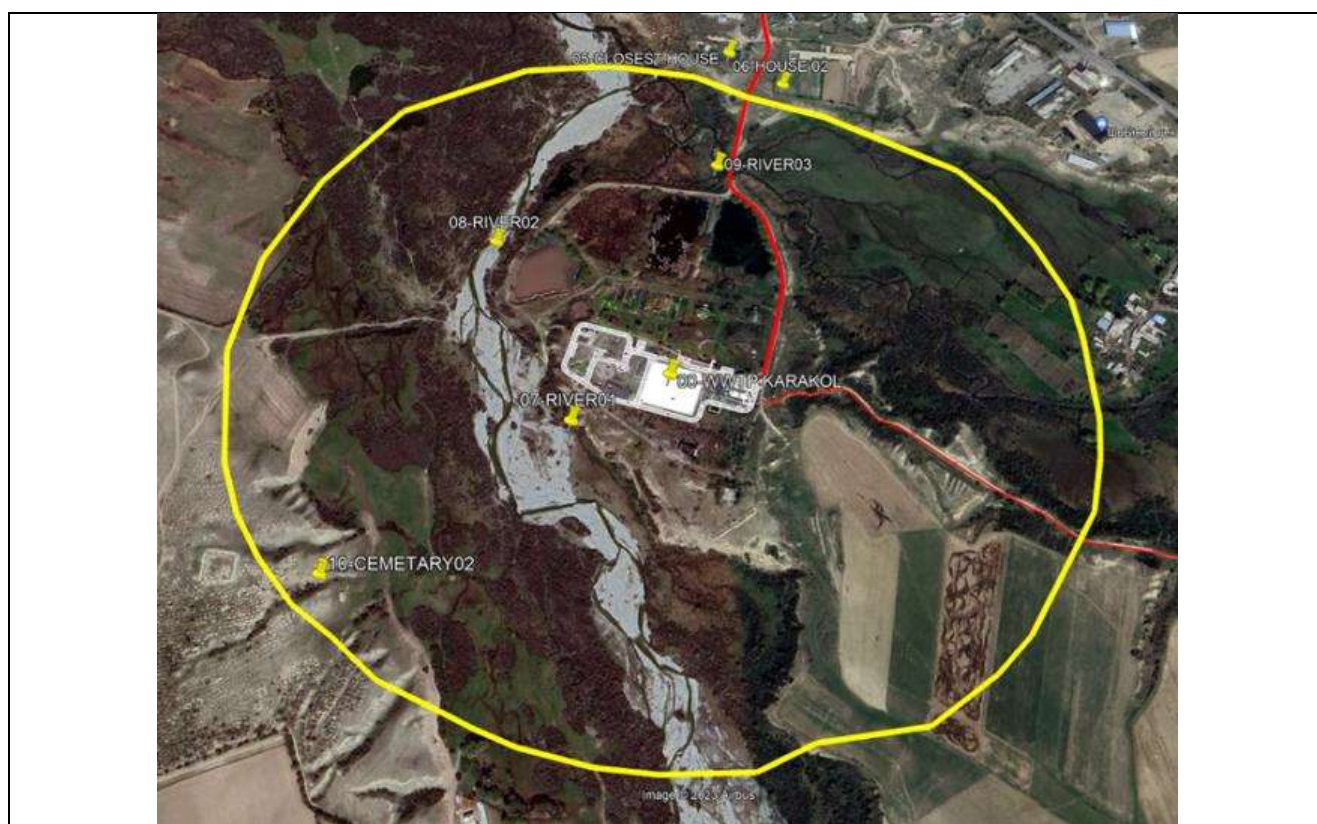


Figure 4-3: Sanitary Protection Zone of the sewage treatment plant 400 metres

(Yellow contour is the SPZ boundary of the WWTP. The size of the SPZ is 400 metres from the boundary of the WWTP)

49. SPZ report passed through the State Environmental Expertise and was approved on 11.09.2023 by the Issyk-Kul Regional Department of MNRETS. According to the report, the source data for the calculation of emissions of pollutants into the atmosphere from the sewage treatment plant are the results of the inventory of sources of emissions of harmful substances into the atmosphere and the source data provided by the Contractor. The report provides the results of calculations of the maximum one-time and gross annual emissions of pollutants into the atmosphere, as well as calculations of the dispersion of pollution in the atmospheric air. Within the borders where all production facilities will be located, the concentration of hydrogen sulfide is 3 MPC, but already at the border of the land plot, the

concentration will be 1.5 MPC. At the northern border of the land plot of the treatment facilities, the concentration will decrease to 0.4 MPC, and at the border of the SPZ, it will be 0.2 MPC. This means that the concentration of hydrogen sulfide at the SPZ border will be 5 times less than the established maximum permissible concentration.

50. Calculation of surface concentration of emissions of ammonia, methane, Methyl mercaptan, hydrogen sulfide at the SPZ

The calculation is based on this formula $d = 16 \sqrt{v_M} \text{ при } v'_M > 2.$

Parameters	cm (mg/m ³)	Concentration at the boarder of 400 meters (s, mg/m ³)
Methane	0,16711205	0,111682
Ammonia	0,001629601	0,001089
Hydrogen sulphide	0,000943976	0,000631
Methyl mercaptan	2,0186E-07	0,000000

51. Based on the calculations carried out, it can be concluded that the maximum surface concentration of emissions of ammonia, methane, methyl mercaptan, hydrogen sulfide at the boundary of the WWTP site does not exceed and is equal to 0.1 MPC. The report also states that to reduce the negative impact of production facilities on the residential development and to ensure hygienic standards the maximum landscaping of the SPZ territory with the mandatory planting of trees and shrubs on the side of residential development is proposed. The selection of species for landscaping of the sanitary protection zones preference is given to mixed tree and shrub plantings, which have biological stability and high decorative qualities in comparison with single-species plantings. At least 50% of the total number of trees planted should be the main tree species with the highest sanitary and hygienic effectiveness, viability in the given soil and climate conditions, and tolerance to emissions.

4.3. Trends

52. As indicated in the earlier sections, the sewerage network construction works are completed, hence no environmental monitoring are conducted. Similarly, the construction of Balykchy WWTP has been completed and testing/ trial run is in progress hence no environmental monitoring are conducted. However, for the ongoing construction works at Karakol WWTP, the AAQ, and noise level monitoring has been conducted between January to June 2024. The contractor has been advised to conduct the water quality monitoring as well.

4.4. Summary of Monitoring/ Observation Outcomes

- At Karakol construction sites, the EHS officer conduct daily visual monitoring and keep records of excess soil, as well as generated solid domestic wastes.
- On-site latrine, trash bins are available on the sites. There is a first aid kit, also there is a site medical facility with the permanent staff and a sanitizer.
- Safety briefings are conducted regularly.
- During the reporting period, no significant signs of negative environmental impact were identified.

4.5. Material Resources Utilization

53. The main resources used in the construction works are water and electricity. Water is used for domestic, hygiene (in the construction camp) and technical (dust suppression) purposes. Water is supplied under a contract with Balykchy and Karakol Vodokanals.

Table 4-3: Material Resources Utilization

#	Contract package and name of Contractor	Electricity for the reporting period, kW/h	Water for the reporting period (m ³)
1.	Contract No. W3 (Consortium of "JV LLC Hayat Group and Bioworks Verfahrenstechnik Gmbh")	2132.1	696.0
2.	Contract No. W4 (Consortium of Contractor CCCC Tianjin Dredging Co., Ltd, China Road and Bridge Corporation and China Northeast Municipal Engineering Design and Research Institute Co., Ltd Joint Venture)	927.7	24642.0
	Total	3059.8	25338.0

4.6. Waste Management

54. The Balykchy WWTP Contractor (Contract No. W4) signed an agreement with Tazalyk for removal of construction waste, the excess soil is stored in a designated area allocated by the Tazalyk. Similarly, the Karakol WWTP Contractor (Contract No. W3) also signed an agreement (dated 22nd May 2024) for the collection and disposal of construction waste with the ME Tazalyk, the disposal location is within the municipal landfill which is located at a distance of 5 km from Karakol city. The table below shows the amount of waste produced by contractors during the reporting period.

Table 4-4: Waste generated during construction works

#	Name of Contractor	Excess soil (m ³)	Solid domestic wastes (t)	Construction and demolition waste (t)
1.	Contract No. W3 (Consortium of "JV LLC Hayat Group and Bioworks Verfahrenstechnik Gmbh")	23000	0.5	930.0
2.	Contract No. W4 (Consortium of Contractor CCCC Tianjin Dredging Co., Ltd, China Road and Bridge Corporation and China Northeast Municipal Engineering Design and Research Institute Co., Ltd Joint Venture)	0	4.0	16.0
	Total	23000	4.5	9316.0

4.7. Occupational and Community Health and Safety Monitoring

4.7.1. Community Health and Safety

55. During the reporting period (January to June 2024), no accidents were reported that could lead to public health and safety problems. All the construction works were carried out during the working hours (between 9am to 6pm). No traffic accidents due to the construction works are recorded.

4.7.2. Workers safety and health

56. There were no major accidents and/or serious incidents of the employees during the reporting period. However, there are few minor injuries reported for which suitable first aid has been provided. The Contractors have appointed EHS officer. Contractors' personnel are regularly instructed in safety and environmental protection. The Contractor's Safety Plan has activities related to COVID-19. Construction workers are provided with the necessary PPEs, first aid kits and sanitizers. The EHS officer of contractors conduct regular briefings on safety and they use PPE during construction work (Refer Annexure 7).

4.8. Capacity Building/ Training

57. In Contract No. W3 (Karakol WWTP), the DSC's National Environmental Specialist Zinina Olga conducted induction training for the Environmental Specialist and EHS officer of the Consortium JV Hayat Group LLC and Bioworks Verfahrenstechnik GmbH. The training was conducted on the 31st May 2024 (Refer Annexure 7). The key training topics includes:

- Environmental monitoring
- Requirements for arrangement of a construction camp according to SSEMP and national legal requirements.
- Occupational health and safety measures (availability of PPE, provision of hot meals and water at the construction site).

58. In Contract No. W4 (Balykchy WWTP), the Contractor's EHS officer conducted safety training/ toolbox talk for the construction labours. The briefing is conducted quarterly for all the labours. For newly hired labors induction training has been conducted. The EHS officer of CCCC Tianjin Dredging Co., Ltd, China Road and Bridge Corporation and China Northeast Municipal Engineering Design and Research Institute Co. conducted a training session (refer **Annexure 7**) for foreign workers on 30th May 2024, nearly 21 people attended the training (11 Chinese labors and 10 Pakistani labors). Key training topics covered includes:

- Waste management in concrete works,
- Sanitary and environmental conditions at site,
- Storage of oils, fuels and toxic materials,
- Management of flora and fauna at the WWTP site and adjacent areas,
- Responsibility of workers to comply with EHS and fire safety rules,
- Provision of special clothing and PPE for workers and correct use and
- Use of PPE during works at height and finishing works.

5. FUNCTIONING OF THE SEMP

5.1. SEMP Review

59. The contract no. W1 (Lot 1 and Lot 2- Balykchy) , W2 (Lot 1 and Lot 2 - Karakol) have been completed, accordingly Post Construction Environmental Audit Report (PCEAR) has been prepared and disclosed in the ADB website. Hence, no environmental monitoring/ management measures envisaged during this reporting period.

60. The Contractors dealing with contract packages W3 (Construction of Balykchy Waste Water Treatment Plant (WWTP) and W4 (Construction of Karakol Waste Water Treatment Plant (WWTP) have full-time environment, health, and safety (EHS) officer for implementation of EMP/SEMP, community liaising, reporting and grievance redressal on a day-to-day basis. During the reporting period, no grievance was recorded for W3 (Construction of Balykchy Waste Water Treatment Plant (WWTP)). However, though the construction works are completed and the commission is in progress. The construction waste is stored within the project area in an unorganized manner. As per the SSEMP, the following management measures should be complied.

- All operational areas (office/storage area, work force camps) should be cleaned up and restored to their previous state soon after operations are complete.
- All construction waste should be disposed in approved municipal dump sites, after receiving permit for construction waste disposal from the Municipality.
- Local district authorities (Balykchy Vodokanal) will be consulted to determine any conditions imposed while issuing permits.



Balykchy WWTP - Construction waste are not stored as per the management measures given in the SSEMP (June 2024)

61. For Contract No. W4 (Construction of Karakol Waste Water Treatment Plant (WWTP), the construction works are initiated in the month of May 2024. As a part of the SSEMP, the environmental monitoring (as per environmental monitoring plan) has to be conducted. In view of that, noise monitoring was conducted on June 2024 (Refer to Annexure 6), however for conducting ambient air quality monitoring (as informed by the contractor) the authorized agency (Department of Monitoring under the MNRETS) was fully engaged with other works and could not find time for conducting the AAQ for the project site. The DSC suggested the contractor inform the authorized agency (Department of Monitoring under the MNRETS) well in advance for conducting the AAQ monitoring. As per the site observation,

the provided toilet facilities may be insufficient for the number of labours involved in the construction works. Excavated materials are to be covered with tarpaulin/ plastic cover to avoid spillage during transportation. Dust prevention measures should be focused more due to the excavation works are in progress. Appropriate/hard barricading has to be provided near the excavated areas.

5.2. Grievances Redressal.

62. For Contract No. W4 (Construction of Karakol Waste Water Treatment Plant (WWTP), the Initiative Group of Geolog Village submitted the letter to ADB KYRM on 15 April 2024. The PMO jointly with the Executing and Implementing agencies thoroughly reviewed and discussed the letter and gave a comprehensive response (Refer to Annexure 10).

6. GOOD PRACTICES AND OPPORTUNITY FOR IMPROVEMENT

6.1. Good Practice

63. In the Contract no W3 (Construction of Karakol Waste Water Treatment Plant (WWTP)), Collection of Municipal Solid waste is practiced, which is a good initiative and the hygiene condition of the kitchen and dining area is observed to be good. Sprinkling of water is observed in the construction site for controlling dust pollution. First aid facility is observed to be satisfactory.



Hygienic condition is maintained in the Kitchen area and Dining area (May 2024)



Sprinkling of water (June 2024)



First aid facility (June 2024)

6.2. Opportunities for Improvement

64. Regular environmental monitoring (as indicated in the SEMP) has to be carried out through an authorized laboratory/ Department of Environmental Monitoring under MNRETS. Excavated materials has to be covered to avoid spillage. Dust prevention measures has to be carried out in Contract no W3 (Construction of Balykchy Waste Water Treatment Plant (WWTP)). Training on SEMP implementation, health and safety, etc. to be conducted for construction labours on a regular basis. For Contract no W4, the operation and maintenance related EHS issues has to be discussed with the maintenance team for better clarity and to adopt the Standard Operating Procedure (SOPs).

7. SUMMARY AND RECOMMENDATIONS

7.1. Summary

- All four sewer network packages W1 (Lot 1 and lot 2 in Balykchy) and W2 (Lot 1 and Lot 2 in Karakol) has been completed and Project Completion Certificate (PCC) has been issued on 10th August 2023 for Balykchy packages and 28th November 2023 for Karakol packages. Post Construction Environmental Audit Report for sewerage networks proposed at Balykchy and Karakol has been completed and disclosed in April 2024 (ADB website) by including it as an annexure to the SAEMR (July to December 2023). During the construction period, the EHS requirements as per the approved SSEMP was adopted by all the contractors to the satisfaction of the Engineer (DSC)
- For Pump Station and Rising Main 1.7 km in Karakol (Contract No. W2), based on the comments received from the PMO, the IEE document was revised/ updated and submitted to ADB on 18th December 2023, after ADB review, the IEE report was disclosed in the ADB website in April 2024.
- Construction of Karakol WWTP (Contract No. W3) was initiated on May 2024 after obtaining necessary clearances from the state expertise and ADB. Initial trainings on the safeguards to be adopted in the construction site was given by the DSC to the contractor. Environmental monitoring was conducted by the MNRETS and the outcomes of the results for both the air quality and noise levels are well within the stipulated limits. Further trainings on the EHS to be conducted by the Contractor to the labours, environmental monitoring to be performed in the site as per the monitoring plan and other EMP requirements (including the Odour monitoring and water quality monitoring) shall be monitored and will be detailed in the subsequent SAEMR.
- Construction of Balykchy WWTP (Package W4) was completed and the contractor requested the PCC on 30th June 2024, accordingly after WWTP site inspection by the DSC have issues the PCC on 13th July 2024, the details of the same will be elaborated in the subsequent SAEMR. During the construction period, the EHS requirements as per the approved SSEMP was adopted by all the contractor to the satisfaction of the Engineer (DSC)

7.2. Recommendations

7.2.1. Regulatory Requirements

- Environmental monitoring⁶ for Ambient air quality (SO₂, NO_x, CO and PM₁₀), Noise (Leq), and Surface water quality (BOD, Total suspended solids (TSS), Total nitrogen, Ammonia, Total phosphorus, Total Coliform and H₂S (to be monitored by the CLO, PIU) as indicated in the IEE/SSEMP must be conducted for ongoing construction works. The monitoring should be conducted by the authorized laboratory/ Department of Environmental Monitoring under MNRETS.

⁶ The frequency of the monitoring and the location shall be decided based on the construction activities and the weather conditions by the DSC/PMO

- Labour requirement should be in line with the International Labour Organization⁷ (ILO) and requirements of national legislation.
- Permission/ clearances/ NoC obtained by the contractors from the line departments/ stakeholder departments has to be submitted to the PIU and PMO

7.2.2. Environmental Aspects

- At construction sites, the contractor's Environmental Specialist should conduct daily visual monitoring and keep the records of excess earth/soil, as well as generated municipal solid waste from the construction camps.
- In Contract No W4, the Construction waste are stored near the labour cum construction camp area, which has to be removed and disposed of in the area identified by the Balykchy Vodokanal.
- The stack requirement for DG set installed in the Balykchy WWTP (contract No. W4) has to be cross verified with the supplier.
- Air quality and water quality (component/ unit wise) has to be tested for Balykchy WWTP during commissioning/operation stage.
- The construction works are just initiated for Contract no W3 (Construction of Balykchy Waste Water Treatment Plant (WWTP)), hence induction training for labours in the EHS has to be conducted frequently so that the labours will be familiarized with the ADB policy as well as Kyrgyzstan rules and regulation requirements
- Toilet facility (bio-toilet/ mobile toilet) should be increased for Contract no W3, it is observed to be inadequate for the existing number of labours. A first aid kit is available however, it should have appropriate medicines as per the ANSI (The American National Standard Institute) First Aid Box Class B requirements.
- Topsoil has been removed and stored, but not preserved, it is suggested to adopt the SEMP management measures for the top soil preservation.
- Toolbox talk and other construction safety briefings are to be conducted regularly by the EHS officer
- GRM register should be maintained on the site as well as project office, the received complaints from the locals should be recorded (the GRM procedure as indicated in the IEE should be followed)

7.2.3. Health and Safety

- Site-specific Health and Safety Plan and Emergency Response Plan have to be revised as per the site condition
- For the Excavation and Foundation works the following measures should be adopted
 - Edge protection should be provided around the pit to prevent person falling around it.
- For work at height (Karakol WWTP's)
 - It is recommended to secure the hand tools while using at height to prevent inadvertent accidental fall of hand tool from height

⁷ The Contractor should, ensure that the labour camps are structurally safe/ stable, reasonable levels of decency, hygiene and comfort.

- It is recommended to provide training in emergency rescue procedures and use of equipment (for emergency responders) to all workers
- It is recommended to include the following details:
 - Details of trained emergency responders
 - Availability and health check-up of emergency rescue equipment (Ascender / Descender equipment with rope)
- Standard edge protection should be provided at all open lead edges of the staircase under construction. It is recommended to provide pipe and coupler arrangement for staircase hand railing arrangement
- Appropriate barricading should be provided for the excavated areas
- Scaffolding should be inspected by a responsible person, and scaffolding inspection tagging system should be implemented to highlight the status of each scaffolding whether it is “FIT” or “UNFIT” for use
- Electrical safety
 - Only licensed electrician should be engaged in electrical works at project site.
 - Ensure all electrical installations including portable electric tools are inspected and tagged by the responsible person on a monthly basis. Also, ensure all sockets are routed through Residual Current Circuit Breaker (RCCB). A documented record of inspection and testing should be maintained
 - Ensure all outdoor panel are waterproof
 - The unused opening in the outdoor panel should be covered with dummies to prevent any reptile entry
 - It is recommended to provide the adequate size of earth conductor for proper grounding of the equipment.
 - Earthing to be provided for temporary lighting arrangement installed at the project sites
 - No cable/ wire joints should be available close to a body of portable machines.
 - The power cable cord of portable machines should be free from cable joints, at least 3 m distance from the body of the machine
- Construction vehicle and transportation vehicles safety
 - Ensure every vehicle is equipped with reversing alarm and it should be functioning correctly.
 - All transport or earth moving equipment and vehicles should be inspected at least once a week by a responsible person and in case if any defect is noticed, it should be immediately taken out of service

ANNEXURES

Environmental Monitoring Report

Annexure 1: Certificate of Completion

Construction of a Sewerage Network in Balykchy- Contract No. W1 Lot 1



Completion Certificate

Date: 10.08.2023
Ref: 0536/ISSIK-W1.1/23-188

To: Sh. Dzhalalova, Director
Impuls Osh Ltd.
Osh Oblast, Karasu district, Kyzyl Kyshtaak Village,
513 Kurmanzhan-Datka Street

Cc: Mr. S. A. Omurkanov PMO Director
Issyk-Kul Wastewater Management Project

Your Ref : Your letter No. 52 dated 21.07.2023
Contract : 0628-KGZ(SF)- Construction of Sewerage Network of Balykchy Lot-1
Subject : Issuance of Certificate of Completion

Dear Ms. Sh. Dzhalalova,

Having received your request for issue of a Certificate of Completion, and having reviewed the executed works at site, in accordance with the Conditions of Contract, Section V – General Conditions, Clause 69.1, we hereby certify the works related to the scope of the referred Contract were substantially completed as shown below:

Date of Substantial Completion: 21 July 2023

Following a joint inspection of the works by the representatives from the Contractor and the Engineer indicative lists of the outstanding works have been prepared and countersigned.

You are required to complete the outstanding items listed in the attachment hereto until 31.08.2023. The outstanding works to be completed include but are not limited to the listed works.

This letter does not relieve you of your obligations to complete the execution of the Works in accordance with Contract nor of your obligations during the Defects Liability Period.

Sincerely yours,

O. Mete Cilek

Team Leader
Temelsu International Engineering Services, Inc.

Encl. Shortages and Defects to be Eliminated

Adres / Address : Yıldızevler 721. Sokak No:6
Çankaya 06550 Ankara TÜRKİYE
Tel : 444 5 603 | +90 312 442 47 20 (pbx)
Fax : +90 312 438 52 14



SHORTAGES and DEFECTS TO BE ELIMINATED

1. Asphalt repair works at the crossing of Mambetalieva – Alieva streets
2. Asphalt repair works at the crossing of Mambetalieva – T. Okeev streets
3. Asphalt repair works at the crossing of Mambetalieva – Kulakunova streets

Construction of a Sewerage Network in Balykchy- Contract No. W1 Lot 2



temelsu

uluslararası MÜHENDİSLİK HİZMETLERİ A.Ş.
international ENGINEERING SERVICES INC.

Ticaret Sicil No: 56349

Web : [http:// www.temelsu.com.tr](http://www.temelsu.com.tr)
E-mail : temelsu@temelsu.com.tr

Completion Certificate

Date: 10.08.2023

Ref: 0536/ISSIK-W1.1/23-189

To: B. Shukurov, General Director

Profit -Express.

Issyk-Kul Oblast, Balykchy City –

Kyrgyz Republic

Cc: Mr. S. A. Omurkanov PMO Director

Issyk-Kul Wastewater Management Project

Your Ref : Your letter No. 01-175/23 dated 28.07.2023

**Contract : 0628-KGZ(SF)- Construction of Sewerage Network of Balykchy Lot-2
Eastern**

Subject : Issuance of Certificate of Completion

Dear Mr. B. Shukurov,

Having received your request for issue of a Certificate of Completion, and having reviewed the executed works at site, in accordance with the Conditions of Contract, Section V – General Conditions, Clause 69.1, we hereby certify the works related to the scope of the referred Contract were substantially completed as shown below:

Date of Substantial Completion: 01 August 2023

Following a joint inspection of the works by the representatives from the Contractor and the Engineer indicative lists of the outstanding works have been prepared and countersigned.

You are required to complete the outstanding items listed in the attachment hereto until 19.08.2023. The outstanding works to be completed include but are not limited to the listed works.

This letter does not relieve you of your obligations to complete the execution of the Works in accordance with Contract nor of your obligations during the Defects Liability Period.

Sincerely yours,

O. Mete Cilek

Team Leader

Temelsu International Engineering Services. Inc.

Encl. Shortages and Defects to be Eliminated

Adres / Address : Yıldızevler 721. Sokak No:6
Çankaya 06550 Ankara TÜRKİYE
Tel : 444 5 603 | +90 312 442 47 20 (pbx)
Fax : +90 312 438 52 14



SHORTAGES and DEFECTS TO BE ELIMINATED

1. Raising the manhole to the road level at the corner of Amanbaeva Sharipova streets
2. Backfilling, compacting and levelling of the line at the corner of Sharipova – Ozernaya streets

Construction for Expansion of Sewer Network in Karakol - Contract No. W2 Lot 1



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uluslararası MÜHENDİSLİK HİZMETLERİ A.Ş.
international ENGINEERING SERVICES INC.

Ticaret Sicil No: 56349

Web : [http:// www.temelsu.com.tr](http://www.temelsu.com.tr)
E-mail : temelsu@temelsu.com.tr

Completion Certificate

Date: 28.11.2023

Ref: 0536/ISSIK-W2.1/23-290

To: N. A. Ismailov, Director General
MINUR LLC

Cc: Mr. S. A. Omurkanov, PMO Director
Issyk-Kul Wastewater Management Project

Your Ref : You Letter No.170 dated 29.09.2023

Contract : 0628-KGZ(SF)- Procurement of Construction for Expansion of Sewer
Network in Karakol Lot-1

Subject : Issuance of Certificate of Completion

Dear Mr. Ismailov,

Having received your request for issue of a Certificate of Completion, and having reviewed and completed testing of the executed works at site, in accordance with the Conditions of Contract, Section V – General Conditions, Clause 69.1, we hereby certify the works related to the scope of the referred Contract were substantially completed as shown below:

Date of Substantial Completion: 30 September 2023

Following a joint inspection of the works by the representatives from the Contractor and the Engineer indicative lists of the outstanding works have been prepared and countersigned.

The outstanding items listed in the attachment will be completed during Defects Liability Period as soon as the weather conditions allow. The outstanding works to be completed include but are not limited to the listed works.

This letter does not relieve you of your obligations to complete the execution of the Works in accordance with Contract nor of your obligations during the Defects Liability Period.

Sincerely yours,

O. Mete Cilek

Team Leader
Temelsu International Engineering Services. Inc.

Encl. Shortages and Defects to be Eliminated

SHORTAGES and DEFECTS TO BE ELIMINATED

- The crossing on Duisheeva Street by the manhole No.1 has settled together with asphalt. It has to be re-excavated, backfilled, compacted and re-asphalted.

Construction for Expansion of Sewer Network in Karakol – Contract No. W2 Lot 2



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international ENGINEERING SERVICES INC.

Ticaret Sicil No: 56349

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Completion Certificate

Date: 28.11.2023

Ref: 0536/ISSIK-W2.2/23-291

To: Mr. M. Ikramov,

Director General of "Inzhenernaya zashchita" LLC.

"Consortium of "Inzhenernaya zashchita" LLC and "Polimer Snab Asia" LLC

Cc: Mr. S. A. Omurkanov, PMO Director

Issyk-Kul Wastewater Management Project

Your Ref: Your letter No.216-1/10 dated 04.10.2023

Contrat : 0628-KGZ(SF)- Procurement of Construction for Expansion of sewer network in Karakol Lot-2

Subject : Issuance of Certificate of Completion

Dear Mr. Ikramov,

Having received your request for issue of a Certificate of Completion, and having reviewed and completed testing of the executed works at site, in accordance with the Conditions of Contract, Section V – General Conditions, Clause 69.1, we hereby certify the works related to the scope of the referred Contract were substantially completed as shown below:

Date of Substantial Completion: 05 October 2023

Following a joint inspection of the works by the representatives from the Contractor and the Engineer indicative lists of the outstanding works have been prepared and countersigned.

You are required to complete the outstanding items listed in the attachment hereto until 08.12.2023. The outstanding works to be completed include but are not limited to the listed works..

This letter does not relieve you of your obligations to complete the execution of the Works in accordance with Contract nor of your obligations during the Defects Liability Period.

Sincerely yours,

O. Mete Cilek

Team Leader

Temelsu International Engineering Services. Inc.

SHORTAGES and DEFECTS TO BE ELIMINATED

- Around of all the manholes in Section 5 near and after Bazar will be checked, backfilled and compacted properly.

Environmental Monitoring Report

Annexure 2: Reports on Monitoring of the Contractors

Project Number:	50176-002
Project Name:	Issyk – Kul Wastewater Management
Packet No. and/or Lot No.	Contract number W4
Components/Scope of Work:	Design and build of Balykchy WWTP
Progress (percentage):	100%
Location/Site inspected:	Balykchy
Date of inspection:	26.02.2024, 14.03.2024, and 30.03.2024
Contractor:	China Northeast Municipal Engineering Design and Research Institute Co., China Road and Bridge Corporation
Supervision Company:	Temelsu International Engineering Inc.
SSEMP Clearance Date:	September 2022

Monitoring/Inspection Questions		Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
1.	Documents	26.02.2024	14.03.2024	30.03.2024		
a.	Is the EIA/IEE updated based on the contract's scope of work and/or detailed engineering design?	Yes	Yes	Yes	Balykchy WWTP IEE was updated, the Sludge drying beds has been replaced with mechanical sludge dewatering system	
b.	Any change in scope of work, design, location, and/or method of construction?	No	No	No		
c.	All permits/clearances on environment, health and safety (EHS) obtained?	Yes	Yes	Yes		
d.	Is the SSEMP informed to workers including subcontractors?	Yes	Yes	Yes		
2.	HSEof Contractor on Employer's site	26.02.2024	14.03.2024	30.03.2024		
a.	Is an Environment Supervisor available?	Yes	Yes	Yes		
b.	Is the Safety Officer on-site?	Yes	Yes	No		

Monitoring/Inspection Questions		Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
c.	Is a copy of the SSEMP available on-site and in worksites?	Yes	Yes	Yes		
d.	Has Contractor established an operational system for HSE?	Yes	Yes	Yes		
e.	Has the Contractor established data management system for HSE?	Yes	Yes	Yes		
f.	Laborers hired from licensed manpower suppliers only?	Yes	Yes	Yes		
g.	All workers (including manpower supply laborers) are insured?	Yes	Yes	Yes		
h.	Number of workers provided with orientation on safeguards and HSE?	20	20	20		
i.	Medical screening carried out for all workers for communicable diseases such as HIV and COVID-19?	Yes	Yes	Yes		
j.	Company EHS policy available and displayed?	Yes	Yes	Yes		
k.	Site risk assessment carried out before start of work?	Yes	Yes	Yes		
l.	Permit to work system followed for critical works?	Yes	Yes	Yes		
m.	Incident reporting and investigation system in place?	Yes	Yes	Yes		
n.	Health and Safety committee established and OHS performance reviewed periodically?	N/A	N/A	N/A		
3.	Facilities					
a.	Are there separate sanitary facilities/toilets for male and female workers?	Yes	Yes	Yes		
b.	Are the toilets in good conditions, clean, and provided with water all the time?	Yes	Yes	Yes		
c.	Is drinking water supply available for workers?	Yes	Yes	Yes		
d.	Is there a rest area for workers?	Yes	Yes	Yes		
e.	Are storage areas for chemicals available and with protection? In safe locations?	N/A	N/A	Yes		

Monitoring/Inspection Questions		Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
f.	Protection from extreme weather provided?	Yes	Yes	Yes		
g.	Are the workers camp kept in clean and safe conditions?	Yes	Yes	Yes	Periodically excess garbage is accumulated on site (generated more than the container capacity)	
3.	Health and Safety					
a.	Toolbox talk given to all workers on daily basis? (check logbook)	Yes	Yes	Yes		
b.	Has the Health and Safety Plan been reviewed and revised from the last inspection?	No	No	No		
c.	Is the Health and Safety Plan translated to local language understandable by foreign and local workers?	Yes	Yes	Yes		
d.	Is there a logbook for Health and Safety?	Yes	Yes	Yes		
e.	Are there first aiders and first aid kits on site? (1 kit and 1 first aider for every 25 workers)	Yes	Yes	Yes		
f.	Are emergency contact details available on-site?	Yes	Yes	Yes		
g.	Are there PPEs available? What are they?	Yes	Yes	Yes		
h.	Are the PPEs in good condition?	Yes	Yes	Yes		
i.	Are the PPEs being used by workers at all times?	Yes	Yes	No		
j.	Are there firefighting equipment on site?	Yes	Yes	No	Firefighting equipment stand was removed for the period of the area levelling.	
k.	Are excavation trenches provided with shores or protection from landslide?	N/A	N/A	N/A		

Monitoring/Inspection Questions		Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
l.	Excavation and trenches deeper than 2 meters are done through permit to work system and following the safe system of work? <i>(check permit to work system – preparation of this is a fundamental task of the Health and Safety Officer)</i>	N/A	N/A	N/A		
m.	Is break time for workers provided?	Yes	Yes	Yes		
n.	Adequate level of light is maintained for working during dark hours?	N/A	N/A	Work is not carried out in the hours of darkness		
o.	Buried and overhead utilities identified and controls taken; as appropriate?	no	No	N/A		
p.	Electrical tools being used are double insulated and damage free?	Yes	Yes	Yes		
q.	Equipment and tools used safe and unbreakable?	Yes	Yes	Yes		
r.	All work above 2 meters at height is done with guard rails installed and wearing full body harness?	N/A	Yes	Yes		
s.	Confined space entry is done through Permit to work system?	N/A	N/A	N/A		
t.	Are workers (contractors and sub-contractors) covered by accident insurance?	Yes	Yes			
u.	Are signages and warning signs installed on worksites? How many per xxx meters and locations?	2 signs at 50 meters	2 signs at 50 meters	2 signs at 50 meters		
v.	Are signages and warning signs translated to local language?	Yes	Yes	Yes		
w.	Are signages and warning signs visible even at night time?	Yes	Yes	Yes		
x.	Are there any accidents since the last inspection? How many and what are these accidents?	No	No	No		
y.	Have accidents been reported to PIU, MP Vodokanal and PMO?	N/A	N/A	N/A		
4.	Community safety					

Monitoring/Inspection Questions		Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
a.	Are excavation areas provided with solid guardrails around them to protect from accidental falls?	N/A	N/A	N/A		
b.	Are safety signages posted around the sites where there are houses, business, or communities?	Yes	Yes	Yes		
c.	Are temporary and safe walkways for pedestrians available near work sites?	N/A	N/A	N/A		
d.	Are there traffic officers or flagman/flagmen to manage traffic and speed limit?	N/A	N/A	N/A		
e.	Are there traffic officers or flagman/flagmen near sites where there are houses, business, or communities?	N/A	N/A	N/A		
f.	Is there a record of treated water quality testing/measurement?	N/A	N/A	N/A		
g.	Is there a logbook for community feedback and/or complaints?	Yes	Yes	N/A		
h.	How many stakeholders engagement, consultations, and information disclosure on EHS have been conducted?	N/A	N/A	N/A		
5.	Solid Waste Management					
a.	Are excavated materials placed sufficiently away from water courses (at least 20 meters)?	Yes	Yes	Yes		
b.	Is solid waste segregation and management in each work site?	No	No	No		
c.	Are hazardous wastes stored separately from non-hazardous wastes?	N/A	N/A	N/A		
d.	Is there a daily collection of solid wastes from work sites?	Yes	Yes	Yes		
e.	Is there a temporary storage area for wastes at worker's camp?	Yes	Yes	Yes		
f.	Are reusable and recyclable materials segregated?	No	No	No		
g.	Is there a logbook for waste collection and disposal?	Yes	Yes	Yes		

Monitoring/Inspection Questions		Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
6.	Water Pollution Control and Wastewater Management					
a.	Are instrumental water quality monitoring activities conducted per agreed SSEMP and monitoring program?	N/A	N/A	N/A		
b.	Are instrumental wastewater quality monitoring activities conducted per agreed SSEMP and monitoring program?	N/A	N/A	N/A		
c.	Does the Contractor test the water supplied to workers for drinking and other domestic use?	N/A	N/A	N/A		
d.	Are there separate sanitary facilities for various types of use (septic tanks, urination, washing, etc.)?	Yes	Yes	Yes		
e.	Is any wastewater discharged to storm drains?	No	No	No		
f.	Is any wastewater being treated prior to discharge?	N/A	N/A	N/A		
g.	Are measures in place to avoid siltation of nearby drainage or receiving bodies of water?	N/A	N/A	N/A		
h.	Are silt traps or sedimentation ponds installed for surface runoff regularly cleaned and freed of silts or sediments?	N/A	N/A	N/A		
i.	Is there a logbook for water and wastewater quality monitoring?	N/A	N/A	N/A		
7.	Dust Control					
a.	Are instrumental air quality monitoring activities conducted per agreed SSEMP and monitoring program?	No	No	No		
b.	Is the construction site watered on daily basis to minimize generation of dust?	Yes	No	No		
c.	Are roads within and around the construction sites sprayed with water on regular intervals?	No	No	No		
d.	Is there a speed control for vehicles at construction sites?	Yes	No	No		

Monitoring/Inspection Questions		Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
e.	Are stockpiles of sand, cement and other construction materials covered to avoid being airborne?	Yes	Yes	Yes		
f.	Are construction vehicles carrying soils and other excavated materials/spoils covered?	Yes	Yes	Yes		
g.	Are power/diesel generators provided with air pollution control devices?	No	No	No		
h.	Are all vehicles regularly maintained to minimize emission of black smoke? Do they have valid emission permits?	Yes	Yes	Yes		
i.	Is there a logbook for air quality monitoring?	Yes	Yes	Yes		
8.	Noise Control					
a.	Are instrumental noise monitoring activities conducted per agreed SSEMP and monitoring program?	Yes	Yes	Yes		
b.	Are there any works near sensitive receptors during night time?	No	No	No		
c.	Do generators operate with doors closed or provided with sound barrier around them?	N/A	N/A	N/A		
d.	Is idle equipment turned off or throttled?	No	No	No		
e.	Are there noise mitigation measures adopted at construction sites?	Yes	Yes	Yes		
f.	Are neighbouring residents notified in advance of any anticipated noisy construction activities?	N/A	N/A	N/A		
g.	Is there a logbook for noise level monitoring?	Yes	Yes	Yes		
9.	Soil Contamination Control					
a.	Are fuels, oils, lubricants, bitumen and other similar materials stored in a covered and concrete-lined storage area?	Yes	Yes	Yes		
b.	Are the fuel tanks/storage constructed with bund to prevent oil, fuels, or chemicals from escaping into the	Yes	Yes	Yes		

Monitoring/Inspection Questions		Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
	environment if the tank/storage leak or burst?					
c.	Are fuels, oils, lubricants, bitumen and other similar materials properly labelled?	Yes	Yes	Yes		
d.	Are storage areas inspected on daily basis?	Yes	Yes	Yes		
e.	Are there sufficient equipment and materials to manage spills?	Yes	Yes	Yes		
f.	There are no source of fire or spark near the storage areas (within 20 meters)?	No	No	No		
g.	Are material safety data sheet (MSDS) available on site?	Yes	Yes	Yes		
h.	Are excess chemicals or materials disposed according the MSDS?	N/A	N/A	N/A		
10.	Traffic Control					
a.	Are reflective traffic signages available around the construction sites and nearby roads?	N/A	N/A	N/A		
b.	Are re-routing signages sufficient to guide motorists?	N/A	N/A	N/A		
c.	Are the excavation sites along roads provided with hard barricades with reflectors?	N/A	N/A	N/A		
d.	Are the excavation sites provided with sufficient lighting at night?	N/A	N/A	N/A		
e.	Are contractor's vehicles and heavy equipment parked properly and not causing additional traffic burden?	N/A	N/A	N/A		
f.	Are affected residents, business and local communities informed in advance of traffic rerouting, works, or road closure?	N/A	N/A	N/A		
10.	Grievance Redressal, Stakeholders Engagement, and Information Disclosure					
a.	Has the contractors provided contact details of focal persons in case of complaints using permanent signboards?	Yes	Yes	Yes		Text of information board has to be changed.

Monitoring/Inspection Questions		Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
b.	Are the contact details readable and understandable by target audience?	No	No	No		
c.	Are the workers (contractors and subcontractors) informed of the GRM?	Yes	Yes	Yes		
d.	Have the PIU, supervising consultants, and contractors provided EHS-related information to local communities, business, and sensitive receptors?	Yes	Yes	Yes		
e.	Are EHS records/documents readily available at the site, to the inspection team, and stakeholders?	Yes	Yes	Yes		
Other Issues/Concerns						
Red Flags:						
Name of Inspector/s:				Name of PMO/PIU Staff:		
Position:				Position:		
Contractor Site Manager:				DSC National Environmental Specialist:	O.V. Zinina	
Contractor Environmental Officer:		Saparbek Sagynov		DSC International Environmental Specialist:		
Contractor Health and Safety Officer:						

Project Number:	50176-002
Project Name:	Issyk – Kul Wastewater Management
Packet No. and/or Lot No.	Contract number W4
Components/Scope of Work:	Design and build of Balykchy WWTP
Progress (percentage):	100%
Location/Site inspected:	Balykchy
Date of inspection:	18.04.2024, 17.05.24, 30.05.24, and 13.06.24
Contractor:	China Northeast Municipal Engineering Design and Research Institute Co., China Road and Bridge Corporation
Supervision Company:	Temelsu International Engineering Inc.
SSEMP Clearance Date:	September 2022

Monitoring/Inspection Questions		Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
1.	Documents	18.04.2024	17.05.24	30.05.24	13.06.24		
a.	Is the EIA/IEE updated based on the contract's scope of work and/or detailed engineering design?	Yes	Yes	Yes	Yes	Balykchy WWTP IEE was updated, the Sludge drying beds has been replaced with mechanical sludge dewatering system	
b.	Any change in scope of work, design, location, and/or method of construction?	Yes	No	No	No	The design was revised as agreed with ADB and DSC	
c.	All permits/clearances on environment, health and safety (EHS) obtained?	Yes	Yes	Yes	Yes		
d.	Is the SSEMP informed to workers including subcontractors?	Yes	Yes	Yes	Yes		
2.	HSE of Contractor on Employer's site	18.04.2024	17.05.24	30.05.24	13.06.24		
a.	Is an Environment Supervisor available?	Yes	Yes	Yes	Yes		

Monitoring/Inspection Questions		Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
b.	Is the Safety Officer on-site?	Yes	Yes	Yes	Yes		
c.	Is a copy of the SSEMP available on-site and in worksites?	Yes	Yes	Yes	Yes		
d.	Has Contractor established an operational system for HSE?	Yes	Yes	Yes	Yes		
e.	Has the Contractor established data management system for HSE?	Yes	Yes	Yes	Yes		
f.	Laborers hired from licensed manpower suppliers only?	Yes	Yes	Yes	Yes		
g.	All workers (including manpower supply laborers) are insured?	Yes	Yes	Yes	Yes		
h.	Number of workers provided with orientation on safeguards and HSE?	20	20	20	20		
i.	Medical screening carried out for all workers for communicable diseases such as HIV and COVID-19?	Yes	Yes	Yes	Yes		
j.	Company EHS policy available and displayed?	Yes	Yes	Yes	Yes		
k.	Site risk assessment carried out before start of work?	Yes	Yes	Yes	Yes		
l.	Permit to work system followed for critical works?	Yes	Yes	Yes	Yes		
m.	Incident reporting and investigation system in place?	Yes	Yes	Yes	Yes		
n.	Health and Safety committee established and OHS performance reviewed periodically?	N/A	N/A	N/A	N/A		
3.	Facilities						
a.	Are there separate sanitary facilities/toilets for male and female workers?	Yes	Yes	Yes	Yes		
b.	Are the toilets in good conditions, clean, and provided with water all the time?	Yes	Yes	Yes	Yes		
c.	Is drinking water supply available for workers?	Yes	Yes	Yes	Yes		
d.	Is there a rest area for workers?	Yes	Yes	Yes	Yes		
e.	Are storage areas for chemicals available and with protection? In safe locations?	N/A	N/A	Yes	Yes		

Monitoring/Inspection Questions		Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
f.	Protection from extreme weather provided?	Yes	Yes	Yes	Yes		
g.	Are the workers camp kept in clean and safe conditions?	Yes	Yes	Yes	Yes	Periodically excess garbage is accumulated on site (generated more than the container capacity)	
3.	Health and Safety						
a.	Toolbox talk given to all workers on daily basis? (check logbook)	Yes	Yes	Yes	Yes		
b.	Has the Health and Safety Plan been reviewed and revised from the last inspection?	No	No	No	No		
c.	Is the Health and Safety Plan translated to local language understandable by foreign and local workers?	Yes	Yes	Yes	Yes		
d.	Is there a logbook for Health and Safety?	Yes	Yes	Yes	Yes		
e.	Are there first aiders and first aid kits on site? (1 kit and 1 first aider for every 25 workers)	Yes	Yes	Yes	Yes		
f.	Are emergency contact details available on-site?	Yes	Yes	Yes	Yes		
g.	Are there PPEs available? What are they?	Yes	Yes	Yes	Yes		
h.	Are the PPEs in good condition?	Yes	Yes	Yes	Yes		
i.	Are the PPEs being used by workers at all times?	Yes	Yes	No	No		
j.	Are there firefighting equipment on site?	Yes	Yes	No	No	Firefighting equipment stand was removed for the period of the area levelling.	

Monitoring/Inspection Questions		Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
k.	Are excavation trenches provided with shores or protection from landslide?	N/A	N/A	N/A	N/A		
l.	Excavation and trenches deeper than 2 meters are done through permit to work system and following the safe system of work? <i>(check permit to work system – preparation of this is a fundamental task of the Health and Safety Officer)</i>	N/A	N/A	N/A	N/A		
m.	Is break time for workers provided?	Yes	Yes	Yes			
n.	Adequate level of light is maintained for working during dark hours?	N/A	N/A	N/A	N/A	Work is not carried out in the hours of darkness	
o.	Buried and overhead utilities identified and controls taken; as appropriate?	no	No	N/A	N/A		
p.	Electrical tools being used are double insulated and damage free?	Yes	Yes	Yes	Yes		
q.	Equipment and tools used safe and unbreakable?	Yes	Yes	Yes	Yes		
r.	All work above 2 meters at height is done with guard rails installed and wearing full body harness?	no	no	Yes	Yes		
s.	Confined space entry is done through Permit to work system?	N/A	N/A	N/A	N/A		
t.	Are workers (contractors and sub-contractors) covered by accident insurance?	Yes	Yes	Yes	Yes		
u.	Are signages and warning signs installed on worksites? How many per xxx meters and locations?	2 signs at 50 meters	2 signs at 50 meters	2 signs at 50 meters	2 signs at 50 meters		
v.	Are signages and warning signs translated to local language?	Yes	Yes	Yes	Yes		
w.	Are signages and warning signs visible even at night time?	Yes	Yes	Yes	Yes		
x.	Are there any accidents since the last inspection? How many and what are these accidents?	No	No	No	No		

Monitoring/Inspection Questions		Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
y.	Have accidents been reported to PIU, MP Vodokanal and PMO?	N/A	No	N/A	N/A		
4.	Community safety						
a.	Are excavation areas provided with solid guardrails around them to protect from accidental falls?	N/A	N/A	N/A	N/A		
b.	Are safety signages posted around the sites where there are houses, business, or communities?	Yes	Yes	Yes	Yes		
c.	Are temporary and safe walkways for pedestrians available near work sites?	N/A	N/A	N/A	N/A		
d.	Are there traffic officers or flagman/flagmen to manage traffic and speed limit?	N/A	N/A	N/A	N/A		
e.	Are there traffic officers or flagman/flagmen near sites where there are houses, business, or communities?	N/A	N/A	N/A	N/A		
f.	Is there a record of treated water quality testing/measurement?	N/A	N/A	N/A	N/A		
g.	Is there a logbook for community feedback and/or complaints?	Yes	Yes	N/A	N/A		
h.	How many stakeholders engagement, consultations, and information disclosure on EHS have been conducted?	N/A	N/A	N/A	N/A		
5.	Solid Waste Management						
a.	Are excavated materials placed sufficiently away from water courses (at least 20 meters)?	Yes	Yes	Yes	Yes		
b.	Is solid waste segregation and management in each work site?	No	No	No	No		
c.	Are hazardous wastes stored separately from non-hazardous wastes?	N/A	N/A	N/A	N/A		
d.	Is there a daily collection of solid wastes from work sites?	Yes	Yes	Yes	Yes		
e.	Is there a temporary storage area for wastes at worker's camp?	Yes	Yes	Yes	Yes		
f.	Are reuseable and recyclable materials segregated?	No	No	No	No		

Monitoring/Inspection Questions		Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
g.	Is there a logbook for waste collection and disposal?	Yes	Yes	Yes	Yes		
6.	Water Pollution Control and Wastewater Management						
a.	Are instrumental water quality monitoring activities conducted per agreed SSEMP and monitoring program?	N/A	N/A	N/A	N/A		
b.	Are instrumental wastewater quality monitoring activities conducted per agreed SSEMP and monitoring program?	N/A	N/A	N/A	N/A		
c.	Does the Contractor test the water supplied to workers for drinking and other domestic use?	N/A	N/A	N/A	N/A		
d.	Are there separate sanitary facilities for various types of use (septic tanks, urination, washing, etc.)?	Yes	Yes	Yes	Yes		
e.	Is any wastewater discharged to storm drains?	No	No	No	No		
f.	Is any wastewater being treated prior to discharge?	N/A	N/A	N/A	N/A		
g.	Are measures in place to avoid siltation of nearby drainage or receiving bodies of water?	N/A	N/A	N/A	N/A		
h.	Are silt traps or sedimentation ponds installed for surface runoff regularly cleaned and freed of silts or sediments?	N/A	N/A	N/A	N/A		
i.	Is there a logbook for water and wastewater quality monitoring?	N/A	N/A	N/A	N/A		
7.	Dust Control						
a.	Are instrumental air quality monitoring activities conducted per agreed SSEMP and monitoring program?	No	No	No	No		
b.	Is the construction site watered on daily basis to minimize generation of dust?	Yes	No	No	No		
c.	Are roads within and around the construction sites sprayed with water on regular intervals?	No	No	No	No		

Monitoring/Inspection Questions		Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
d.	Is there a speed control for vehicles at construction sites?	Yes	No	No	No		
e.	Are stockpiles of sand, cement and other construction materials covered to avoid being airborne?	Yes	Yes	Yes	Yes		
f.	Are construction vehicles carrying soils and other excavated materials/spoils covered?	Yes	Yes	Yes	Yes		
g.	Are power/diesel generators provided with air pollution control devices?	No	No	No	No		
h.	Are all vehicles regularly maintained to minimize emission of black smoke? Do they have valid emission permits?	Yes	Yes	Yes	Yes		
i.	Is there a logbook for air quality monitoring?	Yes	Yes	Yes	Yes		
8.	Noise Control						
a.	Are instrumental noise monitoring activities conducted per agreed SSEMP and monitoring program?	Yes	Yes	Yes	Yes		
b.	Are there any works near sensitive receptors during night time?	No	No	No	No		
c.	Do generators operate with doors closed or provided with sound barrier around them?	N/A	N/A	N/A	N/A		
d.	Is idle equipment turned off or throttled?	No	No	No	no		
e.	Are there noise mitigation measures adopted at construction sites?	Yes	Yes	Yes	Yes		
f.	Are neighbouring residents notified in advance of any anticipated noisy construction activities?	N/A	N/A	N/A	N/A		
g.	Is there a logbook for noise level monitoring?	Yes	Yes	Yes	Yes		
9.	Soil Contamination Control						
a.	Are fuels, oils, lubricants, bitumen and other similar materials stored in a covered and concrete-lined storage area?	Yes	Yes	Yes	Yes		
b.	Are the fuel tanks/storage constructed with bund to prevent oil, fuels, or chemicals from escaping into the environment if the tank/storage leak or burst?	Yes	Yes	Yes	Yes		

Monitoring/Inspection Questions		Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
c.	Are fuels, oils, lubricants, bitumen and other similar materials properly labelled?	Yes	Yes	Yes	Yes		
d.	Are storage areas inspected on daily basis?	Yes	Yes	Yes	Yes		
e.	Are there sufficient equipment and materials to manage spills?	Yes	Yes	Yes	Yes		
f.	There are no source of fire or spark near the storage areas (within 20 meters)?	No	No	No	No		
g.	Are material safety data sheet (MSDS) available on site?	Yes	Yes	Yes	Yes		
h.	Are excess chemicals or materials disposed according the MSDS?	N/A	N/A	N/A	N/A		
10	Traffic Control						
a.	Are reflective traffic signages available around the construction sites and nearby roads?	N/A	N/A	N/A	N/A		
b.	Are re-routing signages sufficient to guide motorists?	N/A	N/A	N/A	N/A		
c.	Are the excavation sites along roads provided with hard barricades with reflectors?	N/A	N/A	N/A	N/A		
d.	Are the excavation sites provided with sufficient lighting at night?	N/A	N/A	N/A	N/A		
e.	Are contractor's vehicles and heavy equipment parked properly and not causing additional traffic burden?	N/A	N/A	N/A	N/A		
f.	Are affected residents, business and local communities informed in advance of traffic rerouting, works, or road closure?	N/A	N/A	N/A	N/A		
10	Grievance Redressal, Stakeholders Engagement, and Information Disclosure						
a.	Has the contractors provided contact details of focal persons in case of complaints using permanent signboards?	Yes	Yes	Yes	Yes		Text of information board has to be changed.

Monitoring/Inspection Questions		Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Yes/No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
b.	Are the contact details readable and understandable by target audience?	No	No	No	No		
c.	Are the workers (contractors and subcontractors) informed of the GRM?	Yes	Yes	Yes	Yes		
d.	Have the PIU, supervising consultants, and contractors provided EHS-related information to local communities, business, and sensitive receptors?	Yes	Yes	Yes	Yes		
e.	Are EHS records/documents readily available at the site, to the inspection team, and stakeholders?	Yes	Yes	Yes	Yes		
	Other Issues/Concerns						
	Red Flags:						
Name of Inspector/s:				Name of PMO/PIU Staff:			
Position:				Position:			
Contractor Site Manager:				DSC National Environmental Specialist:		O.V. Zinina	
Contractor Environmental Officer:		Saparbek Sanynov		DSC International Environmental Specialist:			
Contractor Health and Safety Officer:							

Project Number:	50176-002
Project Name:	Issyk – Kul Wastewater Management
Packet No. and/or Lot No.	Contract number W3
Components/Scope of Work:	Design and build of Karakol WWTP
Progress (percentage):	6%
Location/Site inspected:	Karakol
Date of inspection:	17.05.2024, 31.05.2024, and 14.06.2024
Contractor:	Consortium of JV Hayat Group LLC and Bioworks Verfahrenstechnik Gmbh
Supervision Company:	Temelsu International Engineering Inc.
SSEMP Clearance Date:	April 2024

Monitoring/Inspection Questions		Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
1.	Documents	17.05.2024	31.05.2024	14.06.2024		
a.	Is the EIA/IEE updated based on the contract's scope of work and/or detailed engineering design?	No	No	No		
b.	Any change in scope of work, design, location, and/or method of construction?	No	No	No		
c.	All permits/clearances on environment, health and safety (EHS) obtained?	Yes	Yes	Yes		
d.	Is the SSEMP informed to workers including subcontractors?	Yes	Yes	Yes		
2.	HSE of Contractor on Employer's site	17.05.2024	31.05.2024	14.06.2024		
a.	Is an Environment Supervisor available?	Yes	Yes	Yes		
b.	Is the Safety Officer on-site?	Yes	Yes	Yes		
c.	Is a copy of the SSEMP available on-site and in worksites?	Yes	Yes	Yes		
d.	Has Contractor established an operational system for HSE?	Yes	Yes	Yes		
e.	Has the Contractor established data management system for HSE?	Yes	Yes	Yes		
f.	Laborers hired from licensed manpower suppliers only?	Yes	Yes	Yes		
g.	All workers (including manpower supply laborers) are insured?	Yes	Yes	Yes		

Monitoring/Inspection Questions		Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
h.	Number of workers provided with orientation on safeguards and HSE?	29	29	8	29 people in May, 8 – in June	
i.	Medical screening carried out for all workers for communicable diseases such as HIV and COVID-19?	Yes	Yes	Yes		
j.	Company EHS policy available and displayed?	Yes	Yes	Yes		
k.	Site risk assessment carried out before start of work?	Yes	Yes	Yes		
l.	Permit to work system followed for critical works?	Yes	Yes	Yes		
m.	Incident reporting and investigation system in place?	Yes	Yes	Yes		
n.	Health and Safety committee established and OHS performance reviewed periodically?	N/A	N/A	N/A		
3.	Facilities					
a.	Are there separate sanitary facilities/toilets for male and female workers?	No	No	No		
b.	Are the toilets in good conditions, clean, and provided with water all the time?	Yes	Yes	Yes		
c.	Is drinking water supply available for workers?	Yes	Yes	Yes		
d.	Is there a rest area for workers?	Yes	Yes	Yes		
e.	Are storage areas for chemicals available and with protection? In safe locations?	N/A	N/A	N/A		
f.	Protection from extreme weather provided?	Yes	Yes	Yes		
g.	Are the workers camp kept in clean and safe conditions?	Yes	Yes	Yes		
3.	Health and Safety					
a.	Toolbox talk given to all workers on daily basis? (check logbook)	Yes	Yes	Yes		
b.	Has the Health and Safety Plan been reviewed and revised from the last inspection?	No	No	No		
c.	Is the Health and Safety Plan translated to local language understandable by foreign and local workers?	Yes	Yes	Yes		
d.	Is there a logbook for Health and Safety?	Yes	Yes	Yes		

Monitoring/Inspection Questions		Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
e.	Are there first aiders and first aid kits on site? (1 kit and 1 first aider for every 25 workers)	Yes	Yes	Yes		
f.	Are emergency contact details available on-site?	Yes	Yes	Yes		
g.	Are there PPEs available? What are they?	Yes	Yes	Yes		
h.	Are the PPEs in good condition?	Yes	Yes	Yes		
i.	Are the PPEs being used by workers at all times ?	Yes	Yes	Yes		
j.	Are there firefighting equipment on site?	Yes	Yes	Yes		
k.	Are excavation trenches provided with shores or protection from landslide?	N/A	N/A	N/A		
l.	Excavation and trenches deeper than 2 meters are done through permit to work system and following the safe system of work? (<i>check permit to work system – preparation of this is a fundamental task of the Health and Safety Officer</i>)	N/A	N/A	N/A		
m.	Is break time for workers provided?	Yes	Yes	Yes		
n.	Adequate level of light is maintained for working during dark hours?	N/A	N/A	N/A	Work is not carried out in the hours of darkness	
o.	Buried and overhead utilities identified and controls taken; as appropriate?	no	No	No		
p.	Electrical tools being used are double insulated and damage free?	Yes	Yes	Yes		
q.	Equipment and tools used safe and unbreakable?	Yes	Yes	Yes		
r.	All work above 2 meters at height is done with guard rails installed and wearing full body harness?	N/A	N/A	N/A		
s.	Confined space entry is done through Permit to work system?	N/A	N/A	N/A		
t.	Are workers (contractors and subcontractors) covered by accident insurance?	Yes	Yes	Yes		
u.	Are signages and warning signs installed on worksites? How many per xxx meters and locations?	4 signs at 50 meters	4 signs at 50 meters	4 signs at 50 meters		
v.	Are signages and warning signs translated to local language?	Yes	Yes	Yes		

Monitoring/Inspection Questions		Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
w.	Are signages and warning signs visible even at night time?	Yes	Yes	Yes		
x.	Are there any accidents since the last inspection? How many and what are these accidents?	No	No	No		
y.	Have accidents been reported to PIU, MP Vodokanal and PMO?	N/A	No	N/A		
4.	Community safety					
a.	Are excavation areas provided with solid guardrails around them to protect from accidental falls?	Yes	Yes	Yes		
b.	Are safety signages posted around the sites where there are houses, business, or communities?	Yes	Yes	Yes		
c.	Are temporary and safe walkways for pedestrians available near work sites?	N/A	N/A	N/A		
d.	Are there traffic officers or flagman/flagmen to manage traffic and speed limit?	N/A	N/A	N/A		
e.	Are there traffic officers or flagman/flagmen near sites where there are houses, business, or communities?	N/A	N/A	N/A		
f.	Is there a record of treated water quality testing/measurement?	N/A	N/A	N/A		
g.	Is there a logbook for community feedback and/or complaints?	Yes	Yes	Yes		
h.	How many stakeholders engagement, consultations, and information disclosure on EHS have been conducted?	N/A	N/A	N/A		
5.	Solid Waste Management					
a.	Are excavated materials placed sufficiently away from water courses (at least 20 meters)?	Yes	Yes	Yes		
b.	Is solid waste segregation and management in each work site?	Yes	Yes	Yes		
c.	Are hazardous wastes stored separately from non-hazardous wastes?	N/A	N/A	N/A		
d.	Is there a daily collection of solid wastes from work sites?	Yes	Yes	Yes		
e.	Is there a temporary storage area for wastes at worker's camp?	Yes	Yes	Yes		

Monitoring/Inspection Questions		Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
f.	Are reusable and recyclable materials segregated?	Yes	Yes	Yes		
g.	Is there a logbook for waste collection and disposal?	Yes	Yes	Yes		
6.	Water Pollution Control and Wastewater Management					
a.	Are instrumental water quality monitoring activities conducted per agreed SSEMP and monitoring program?	No	No	No	Contract is signed with the laboratory of the Monitoring Department of MNRETS.	
b.	Are instrumental wastewater quality monitoring activities conducted per agreed SSEMP and monitoring program?	No	No	No		
c.	Does the Contractor test the water supplied to workers for drinking and other domestic use?	N/A	N/A	N/A	Bottled water	
d.	Are there separate sanitary facilities for various types of use (septic tanks, urination, washing, etc.)?	Yes	Yes	Yes		
e.	Is any wastewater discharged to storm drains?	No	No	No		
f.	Is any wastewater being treated prior to discharge?	No	No	No		
g.	Are measures in place to avoid siltation of nearby drainage or receiving bodies of water?	N/A	N/A	N/A		
h.	Are silt traps or sedimentation ponds installed for surface runoff regularly cleaned and freed of silts or sediments?	N/A	N/A	N/A		
i.	Is there a logbook for water and wastewater quality monitoring?	No	No	No		
7.	Dust Control					
a.	Are instrumental air quality monitoring activities conducted per agreed SSEMP and monitoring program?	No	No	No		
b.	Is the construction site watered on daily basis to minimize generation of dust?	Yes	Yes	Yes		

Monitoring/Inspection Questions		Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
c.	Are roads within and around the construction sites sprayed with water on regular intervals?	Yes	Yes	Yes		
d.	Is there a speed control for vehicles at construction sites?	Yes	Yes	Yes		
e.	Are stockpiles of sand, cement and other construction materials covered to avoid being airborne?	No	No	No		
f.	Are construction vehicles carrying soils and other excavated materials/spoils covered?	No	No	No		
g.	Are power/diesel generators provided with air pollution control devices?	No	No	No		
h.	Are all vehicles regularly maintained to minimize emission of black smoke? Do they have valid emission permits?	Yes	Yes	Yes		
i.	Is there a logbook for air quality monitoring?	Yes	Yes	Yes		
8.	Noise Control					
a.	Are instrumental noise monitoring activities conducted per agreed SEMP and monitoring program?	Yes	Yes	Yes		
b.	Are there any works near sensitive receptors during night time?	No	No	No		
c.	Do generators operate with doors closed or provided with sound barrier around them?	N/A	N/A	N/A		
d.	Is idle equipment turned off or throttled?	No	No	No		
e.	Are there noise mitigation measures adopted at construction sites?	Yes	Yes	Yes		
f.	Are neighbouring residents notified in advance of any anticipated noisy construction activities?	N/A	N/A	N/A		
g.	Is there a logbook for noise level monitoring?	Yes	Yes	Yes		
9.	Soil Contamination Control					
a.	Are fuels, oils, lubricants, bitumen and other similar materials stored in a covered and concrete-lined storage area?	N/A	N/A	N/A		
b.	Are the fuel tanks/storage constructed with bund to prevent oil, fuels, or chemicals from escaping into the environment if the tank/storage leak or burst?	N/A	N/A	N/A		

Monitoring/Inspection Questions		Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
c.	Are fuels, oils, lubricants, bitumen and other similar materials properly labelled?	N/A	N/A	N/A		
d.	Are storage areas inspected on daily basis?	Yes	Yes	Yes		
e.	Are there sufficient equipment and materials to manage spills?	Yes	Yes	Yes		
f.	There are no source of fire or spark near the storage areas (within 20 meters)?	No	No	No		
g.	Are material safety data sheet (MSDS) available on site?	Yes	Yes	Yes		
h.	Are excess chemicals or materials disposed according the MSDS?	N/A	N/A	N/A		
10.	Traffic Control					
a.	Are reflective traffic signages available around the construction sites and nearby roads?	N/A	N/A	N/A		
b.	Are re-routing signages sufficient to guide motorists?	N/A	N/A	N/A		
c.	Are the excavation sites along roads provided with hard barricades with reflectors?	N/A	N/A	N/A		
d.	Are the excavation sites provided with sufficient lighting at night?	N/A	N/A	N/A		
e.	Are contractor's vehicles and heavy equipment parked properly and not causing additional traffic burden?	N/A	N/A	N/A		
f.	Are affected residents, business and local communities informed in advance of traffic rerouting, works, or road closure?	N/A	N/A	N/A		
10.	Grievance Redressal, Stakeholders Engagement, and Information Disclosure					
a.	Has the contractors provided contact details of focal persons in case of complaints using permanent signboards?	Yes	Yes	Yes		Text of information board has to be changed.
b.	Are the contact details readable and understandable by target audience?	No	No	No	Font size has to be increased for	

Monitoring/Inspection Questions		Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Yes/ No/ Not applicable (n/a)	Observation/ Reason/ Rationale	Required Action
					better visibility	
c.	Are the workers (contractors and subcontractors) informed of the GRM?	Yes	Yes	Yes		
d.	Have the PIU, supervising consultants, and contractors provided EHS-related information to local communities, business, and sensitive receptors?	Yes	Yes	Yes		
e.	Are EHS records/documents readily available at the site, to the inspection team, and stakeholders?	Yes	Yes	Yes		
Other Issues/Concerns						
Red Flags:						
Name of Inspector/s:				Name of PMO/PIU Staff:		
Position:				Position:		
Contractor Site Manager:				DSC National Environmental Specialist:		O.V. Zinina
Contractor Environmental Officer:		Anara Bukarova		DSC International Environmental Specialist:		
Contractor Health and Safety Officer:						

Annexure 3: Site Observations (Photos)

Contract no W4 (Balykchy WWTP) – Site photos are taken in the month of May 2024



Unskilled labour – Training is required (May 2024)



Face mask (PPEs) should be provided (to prevent aerosol entering from WWTP into lungs)





Construction waste are stored in the WWTP backyard – to be disposed as per SSEMP

Contract no W4 (Karakol WWTP) – Site photos are taken in the month of May 2024



Old structures are demolished



Excavated earth stored in uncontained environment



Excavated materials are not covered during transportation



Top soil is just stored and not preserved



Toilet facilities are observed to be inadequate



Hard barricading should have been provided for the excavated areas

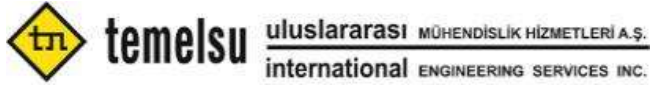


Safety Information board is provided near the office



Septic tank cover is partially closed, which will lead to mosquito breeding

Annexure 4: Non-Conformity Tracking Report



Issyk-Kul Wastewater Management Project

Non-Conformity Tracking Report

Country	Kyrgyzstan
Project Location	Issyk-Kul Region
Project Name	Issyk-Kul Wastewater Management Project
ADB Project No.	0628-KGZ (SF)
ADB Loan No	
Project Start Date	June / 2019
Anticipated Project End Date	31 December/ 2026
Project Implementation Unit Name	Issyk-Kul Wastewater Management Project Office (PMO)
Person Responsible for Tracking	Kylychbek Zhundubaev
Date Closed	

Non-Conformity Tracking Report

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
1	Lot2 NW Balykchy (PROFIT EXPRESS)	30/03/22	Health	staff are not aware of the first aid kit	Inform the staff where the first aid kit is stored	N1	Minor	04/04/22	Low	Aman Akunov	Closed	02/04/22
2	Lot1 NW Balykchy (IMPULSE OSH)	30/03/22	Health	staff are not aware of the first aid kit	Inform the staff where the first aid kit is stored	N2	Minor	04/04/22	Low	Bekmamat Japiey	Closed	04/04/22
3	Lot1 NW Balykchy (IMPULSE OSH)	30/03/22	Safety	Trench excavation is not secured	Bring the bridges in compliance with safety requirements	N3	Minor	04/04/22	High	Bekmamat Japiey	Closed	04/04/22
4	Lot1 NW Karakol (PE Minur LLC)	27/04/22	Environment	Bio-toilet missing	Install a bio-toilet	N4	Minor	04/05/22	Low	Bekzat Shergazievich Dadybaev	Closed	02/05/22
5	WWTP Balykchy (CRBC)	20/06/22	Other	Some excavation, some lean concrete, some part of steel works etc. have been implemented without approval / permission / inspection of DSC. IEE and SSEMP	Design should be approved	N5	N/A	25/07/22	Medium	Contractor's Project Manager	Closed	27/07/22
6		20/06/22	Other		Excavation plan should be submitted		N/A	15/07/22	Medium	Contractor's Project Manager	Closed	01/07/22
7		20/06/22	Other		Lean concrete quality and thickness testes should be made		N/A	15/07/22	Medium	Site Manager	Closed	04/07/22
8		20/06/22	Other		Corroded steel bars should be removed		N/A	25/07/22	Low	Site Manger	Closed	05/09/22

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
9		20/06/22	Other	has not been approved yet.	Steel tests should be made		N/A	15/07/22	Low	Site Manger	Closed	01/07/22
10		20/06/22	Other		All local authority permits should be taken		Major	15/07/22	High	Project Manager	Closed	10/07/22
11		20/06/22	Environment		IEE, EMP and SSEMP should be approved		Major	15/07/22	High	Project Manager	Closed	02/09/22
12	Lot1 NW Karakol (PE Minur LLC)	05/08/22	Health	A first aid kit should always be on the construction site.	Ensure that the first aid kit is located.	N6	N/A	12/08/22	Low	Site Manager	Closed	06/08/22
13	Lot1 NW Balykchy (IMPULSE OSH)	04/08/22	Safety	There is no fencing of open hatches.	Protect or close all hatches and pits that pose a danger.	N7	Major	11/08/22	High	Contractor's Project Manager	Closed	09/08/22
14	Lot1 NW Balykchy (IMPULSE OSH)	04/08/22	Other	Excess soil is located on the site.	Remove all excess soil		N/A	11/08/22	Low	Contractor's Project Manager	Closed	10/08/22
15	Lot2 NW Balykchy (PROFIT EXPRESS)	04/08/22	Safety	Workers should always be in a PPE	Provide workers with PPE and monitor their use.	N8	Minor	05/08/22	Low	Site Manager	Closed	05/08/22

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
16	Lot2 NW Karakol (JV Inzhenermay a Zashchita LLC)	05/08/22	Environment	Clogging of the soil with bitumen heating products	Clean up all places of contamination. To provide a platform for bitumen works, which will have a sand or soil cushion.	N9	N/A	12/08/22	Low	Site Manager	Closed	10/08/22
17		05/08/22	Health	A first aid kit should always be on the construction site.	Ensure that the first aid kit is located.		N/A	12/08/22	Low	Site Manager	Closed	06/08/22
18	Lot1 NW Karakol (PE Minur LLC)	05/08/22	Health	A first aid kit should always be on the construction site.	Ensure that the first aid kit is located.	N10	N/A	12/08/22	Low	Site Manager	Closed	06/08/22
19	WWTP Balykchy (CRBC)	15/09/22	Safety	Debris on the way to the shower and toilet.	Clear the way to the shower and toilet.	N11	Minor	16/09/22	Medium	Site Manager	Closed	29/09/22
20	Lot1 NW Balykchy (IMPULSE OSH)	15/09/22	Environment	There is no toilet	The toilet should always be on the construction site	N12	Minor	17/09/22	Low	Site Manager	Closed	19/09/22
21		15/09/22	Other	Remove excess soil	Excess soil is taken to a special site		N/A	17/09/22	Low	Site Manager	Closed	19/09/22

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
22	Lot1 NW Karakol (PE Minur LLC)	16/09/22	Environment	No trash cans	Garbage cans should always be on the construction site	N13	Minor	16/09/22	Low	Site Manager	Closed	19/09/22
23	Lot2 NW Karakol (JV Inzhenernay a Zashchita LLC)	16/09/22	Environment	Workers work without PPE	Workers should always be in a PPE on the construction site	N14	Minor	16/09/22	Low	Site Manager	Closed	19/09/22
24		16/09/22	Health	A first aid kit should always be on the construction site.	Ensure that the first aid kit is located.		N/A	16/09/22	Low	Site Manager	Closed	19/09/22
25		16/09/22	Environment	there is no toilet	Install a bio toilet on a construction site		Minor	18/09/22	Low	Site Manager	Closed	22/09/22
26	WWTP Balykchy (CRBC)	28/09/22	Health	Dormitories are not in proper condition	To bring the rooms for workers in proper condition: make the floor, bring the beds into conformity (install beds of the right length), place the necessary shelves for belongings	N15	Major	21/10/22	High	Contractor's Project Manager	Closed	10/01/23

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
27	WWTP Balykchy (CRBC)	26/10/22	Environment	Site should be cleaned	remove garbage located on the site	N16	Minor	01/11/22	Low	Site Manager	Closed	29/10/22
28		26/10/22	Environment	Oil leaks	Fix oil leaks of machinery operated at WWTP, maintain construction machinery in the proper condition throughout construction works		Minor	01/11/22	Low	Site Manager	Closed	31/10/22
29		26/10/22	Health	Kitchen not in hygienic conditions	Arrange a canteen in the room next to the kitchen to meet the sanitary-hygienic requirements		Major	26/11/22	High	Contractor's Project Manager	Closed	31/10/22
30	Lot1 NW Balykchy (IMPULSE OSH)	26/10/22	Environment	A portable toilet is not available	Install a bio toilet on a construction site	N17	Minor	03/11/22	Low	Site Manager	Closed	27/10/22
31	Lot1 NW Karakol (PE Minur LLC)	27/10/22	Environment	Portable toilet was hit by a car and does not exist	Supply a new toilet	N17	Minor	04/11/22	Low	Site Manager	Closed	28/10/22

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
32	Lot2 NW Karakol (JV Inzhenernay a Zashchita LLC)	27/10/22	Other	The information board was broken	Provide a new board	N18	N/A	03/11/22	Low	Site Manager	Closed	01/11/22
33	Lot1 NW Balykchy (IMPULSE OSH)	27/11/22	Environment	There is no toilet	The toilet must be permanently located on the construction site	N19	Minor	27/11/22	Low	Site Manager	Closed	30/11/22
34	Lot2 NW Balykchy (PROFIT EXPRESS)	24/11/22	Environment	There is no toilet	Install a bio toilet	N20	Minor	24/11/22	Low	Site Manager	Closed	28/11/22
35	Lot1 NW Karakol (PE Minur LLC)	27/11/22	Other	There is no information board	Information board should be installed	N21	N/A	27/11/22	Low	Site Manager	Closed	30/11/22
36	Lot2 NW Karakol (JV Inzhenernay a Zashchita LLC)	27/11/22	Other	Safety log not proper	The logs must meet the requirements	N22	N/A	27/11/22	Low	Site Manager	Closed	28/11/22
37	WWTP Balykchy (CRBC)	26/11/22	Environment	Construction debris and household garbage	Garbage should be cleaned daily	N23	Minor	26/11/22	Low	Site Manager	Closed	27/11/22
38		26/11/22	Safety	There is no safety log on the construction site	The safety log must be at the construction site		N/A	26/11/22	Low	Site Manager	Closed	27/11/22
39	Lot1 NW Karakol (PE Minur LLC)	19/05/23	Environment	There is no contract with the	Conclude a contract	N24	N/A	31/05/23	Low	Contractor's Project Manager	Closed	08/08/23

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
				laboratory for air analysis								
40	Lot2 NW Karakol (JV Inzhenernay a Zashchita LLC)	19/05/23	Environment	There is no contract with the laboratory for air analysis	Conclude a contract	N25	N/A	31/05/23	Low	Contractor's Project Manager	Closed	08/06/23
41		19/05/23	Environment	There is no dumpster	The dumpster must be permanently located on the construction site		N/A	22/05/23	Low	Site Manager	Closed	22/05/23
42	WWTP Balykchy (CRBC)	15/06/23	Safety	Fire extinguishing panel has to be equipped fully.	Procure new equipment.	N26	N/A	26/06/23	Low	Site Manager	Closed	22/06/23
43	Lot1 NW Karakol (PE Minur LLC)	16/06/23	Social	Information board does not have a telephone number of LFP	Add a telephone number	N26	N/A	23/06/23	Low	Contractor's Project Manager	Closed	15/08/23
44	Lot1 NW Karakol (PE Minur LLC)	27/06/23	Environment	Contract with a laboratory has to be signed	Conclude a contract	N27	N/A	04/07/23	Low	Site Manager	Closed	08/08/23
45	WWTP Balykchy (CRBC)	29/06/23	Safety	The fire extinguishers are not full.	Replace the equipment.	N28	Minor	04/07/23	Low	Site Manager	Closed	30/06/23
46	Lot1 NW Karakol (PE Minur LLC)	25/07/23	Environment	People complain	Strengthen the frequency of	N29	Major	26/07/23	Low	Site Manager	Closed	26/07/23

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
				about the dust	dust hydro suppression							
47	WWTP Balykchy (CRBC)	24/07/23	Safety	Not all workers use PPE	Conduct additional safety training	N30	Major	28/07/23	Medium	Health and Safety Engineer	Closed	30/07/23
48	WWTP Balykchy (CRBC)	08/08/23	Health	The first aid kit has no instructions and is not properly organized	Indicate the intended use of medication, label the first aid kit	N31	Minor	14/08/23	Low	HSE Engineer	Closed	15/08/23
49			Safety	The site shall be fenced	Stretch networks on stairs and bridges		Major	14/08/23	Medium	HSE Engineer	Closed	15/08/23
50			Safety	The temporary bridges are dangerous	Make the temporary bridges safer		Major	14/08/23	High	HSE Engineer	Closed	15/08/23
51	Lot1 NW Karakol (PE Minur LLC)	09/08/23	Other	The operator did not have his license with him	Always carry a driver's license	N32	Minor	14/08/23	Low	Site Manager	Closed	10/08/23
52			Safety	No shores in the trenches	Install shores		Minor	14/08/23	Medium	Site Manager	Closed	14/08/23
53			Safety	The site is not fenced	Install fencing with signaling tape		Minor	14/08/23	Low	Site Manager	Closed	10/08/23
54	WWTP Balykchy (CRBC)	23/08/23	Safety	Not all places of work at height are secured by network.	Net all areas where work is to be carried out	N33	Minor	24/08/23	Medium	HSE Engineer	Closed	24/08/23

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
55			Environment	Dust generation due to machinery movement on site	Water the area before work	N34	Minor	24/08/23	Low	Environmental Engineer	Closed	24/08/23
56	WWTP Balykchy (CRBC)	18/09/23	Safety	There is no fire-extinguishing board at the welding area	Provide the board	N35	Minor	19/09/23	Low	HSE Engineer	Closed	19/09/23
57			Environment	Heavy dusting at the construction site	Suppress dust regularly with water		Minor	19/09/23	Low	Environmental Engineer	Closed	19/09/23
58			Environment	Soil contaminated with oil	Cut off contaminated soil		Minor	19/09/23	Low	Environmental Engineer	Closed	19/09/23
59	WWTP Balykchy (CRBC)	19/10/24	Environment	Fuel leakage on site	Cut off contaminated soil	N36	Minor	23/09/23	Low	Environmental Engineer	Closed	19/09/23
60		19/10/23	Environment	Fuel leakage	Cut off contaminated soil		Minor	26/10/23	Low	Environmental Engineer	Closed	15/11/23
61		19/10/23		Garbage is observed on site	Removal of garbage to a sanitary landfill.		Minor	23/10/23	Low	Environmental Engineer	Closed	15/11/23
62	WWTP Balykchy (CRBC)	01/11/23	Environment	Garbage is observed on site	Clean the site	N37	Minor	06/11/23	Low	Environmental Engineer	Closed	15/11/23
63		01/11/23	Environment	Fuel leakage	Cut off the contaminated soil and fill clean soil		Minor	06/11/23	Low	Environmental Engineer	Closed	15/11/23

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
64		01/11/23	Safety	No protective fence	The site shall be fenced		Minor	06/11/23	Medium	HSE Engineer	Closed	15/11/23
65		01/11/23	Social	No markings on site	Provide identification markings		N/A	01/11/23	Low	Site Manager	Open	
66	WWTP Balykchy (CRBC)	30/11/23	Environment	Fuel leakage and debris	Cut the contaminated soil, remove debris	N38	Minor	30/11/23	Low	Environmental Engineer	Closed	30/12/23
67		30/11/23	Environment	Fuel leakage	Repair machinery		Minor	30/11/23	Low	Site Manager	Closed	28/12/23
68		26/12/23	Environment	Garbage is observed on site	Rubbish removal		Minor	26/12/23	Low	Environmental Engineer	Closed	30/12/23
69	WWTP Balykchy (CRBC)	26/02/24	Safety	open manholes;	Cover all manholes	N39	Minor	04/03/24	Medium	HSE Engineer	Closed	15/03/24
70		26/02/24	Other	debris on the site	Clean the entire construction site		Minor	04/03/24	Low	HSE Engineer	Closed	15/03/24
71		26/02/24	Other	There is no full-time Environmental Specialist on the site	Appoint an environmental specialist		Major	04/03/24	Medium	Project Manager	Closed	04/04/24
72	WWTP Balykchy (CRBC)	14/03/24	Safety	There is no railing on the scaffolding	Install a net	N40	Minor	18/03/24	Medium	HSE Engineer	Closed	05/04/24
73	WWTP Balykchy (CRBC)	29/03/24	Safety	Workers do not use PPE	Conduct training and constant monitoring by a safety and health engineer	N41	Minor	01/04/24	Medium	HSE Engineer	Closed	05/04/24

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
74		29/03/24	Environment	Incineration of waste on the site	Conduct additional training on EMP requirements		Minor	05/04/24	Medium	HSE Engineer	Closed	05/04/24
75		29/03/24	Safety	There is no firefighting equipment stand at the construction site	Install a stand		Major	05/04/24	Medium	HSE Engineer	Closed	14/04/24
76	WWTP Balykchy (CRBC)	18/04/24	Environment	Environmental monitoring is not carried out. Filling out forms	Environmental monitoring to be carried out by the new specialist	N42	Minor	25/04/24	Medium	Environmental Specialist	Closed	01/05/24
77	WWTP Balykchy (CRBC)	30/05/24	Safety	There is no protective fence during high-altitude work	All work at height must be carried out with a guardrail and/or safety belt.	N43	Minor	01/06/24	Medium	Environmental Specialist	Closed	03/06/24
78	Karakol WWTP	17/05/24	Safety	There is no foundation pit fencing	Install a fence	N44	Minor	25/05/24	Medium	HSE Engineer	Closed	24/05/24
79	Karakol WWTP	31/05/24	Other	There is no construction site billboard	Install a construction site billboard	N45	N/A	07/06/24	Low	Project Manager	Closed	14/06/24
80	Balykchy WWTP	13/06/24	Environment	Non-collection of wastes in Balykchy	Check with ME Tazalyk to dispose the construction waste as soon as possible	N46	Minor	31/07/24	Medium	Environmental Specialist	Open	

No	Site/Location	Date Recorded	Category	Description of Issue	Corrective Action/s	NCN No	NC Level	Due Date	Priority	Person Responsible	Status	Date Closed
81	Balykchy WWTP	13/06/24	Environment	Non-wearing of facemasks of workers	PPEs (face mask to be given to the workers entering the screening chamber)	N47	Minor	30/06/24	Medium	Environmental Specialist	Open	
82	Balykchy WWTP	13/06/24	Environment	Garbage on the site	Clean the site.	N48	Minor	18/06/24	Low	Environmental Specialist	Closed	19/06/24
83	Karakol WWTP	31/05/24	Other	Inadequate toilet facilities	Separate Toilet facility to be provided for male and female staffs/labours	N49	Minor	31/07/24	Medium	Project Manager	Open	
84	Karakol WWTP	31/05/24	Safety	No hard barricades in excavated areas	Hard barricading has to be provided near the excavated areas	N50	Major	31/07/24	Medium	HSE Engineer	Open	

Annexure 5 – Action Taken Report – Balykchy WWTP

**CCCC Tianjin Dredging Co., Ltd, China Road and Bridge Corporation
and China Northeast Municipal Engineering Design and Research
Institute Co., Ltd Joint Venture**

JV/WWTP/2024/011

April 3, 2024

**To: Temelsu International Engineering Services Inc
Design and Supervision Consultant for IWMP
Attn.: Mr. Mete Cilek, Team Leader**

**CC: Department of Drinking Water Supply and Sewerage development under the State Agency
of architecture, construction and housing and communal services under the office of ministers
of the Kyrgyz Republic
Mr. S.A. Omurkanov - Director of the Project Management Office**

**Project: Design and Build WWTP Balykchy
Subject: Environmental rectification report**

Dear Sir,

As non-compliances were identified during the ADB mission and by Environmental specialist from consultant, we organized personnel training and following measures were implemented:

1. Manholes. The temporary cover is installed, once the work inside of manhole is totally finished, permanent cover will be installed.



2. Contractor's environmental specialist. We hired new environmental specialist Mr. Sagynov Sapar Estebesovich who is experienced for this project.

3. Site cleaning. Site was cleaned by contractor's employees and materials are stored centrally.

Address:
Tel: 00996-312-320295

155b/v Manas Ave. Bishkek Kyrgyzstan 720014
Email: tjandcrbc_jv@163.com

**CCCC Tianjin Dredging Co., Ltd, China Road and Bridge Corporation
and China Northeast Municipal Engineering Design and Research
Institute Co., Ltd Joint Venture**



4. Soil contaminated by fuels was cleaned. Equipment with oil leakage was removed out of site.
5. Stable and safe flooring was installed and a protective railing installed.



Address:
Tel: 00996-312-320295

155b/v Manas Ave. Bishkek Kyrgyzstan 720014
Email: tjdandcrbc_jv@163.com

**CCCC Tianjin Dredging Co., Ltd, China Road and Bridge Corporation
and China Northeast Municipal Engineering Design and Research
Institute Co., Ltd Joint Venture**

6. We employed 5 local employees who will take responsibility for cleaning site daily.
7. New environment specialist will start working today and daily monitoring of HSE activities and record will be done.
8. Rubbish fire is prohibited according to your order.
9. new fire shield is prepared and standing at site.



10. workers are equipped PPE when they work.
11. New containers are installed for construction waste.



Sincerely,

Yu Zhiping,
Project Manager



Address:
Tel: 00996-312-320295

155b/v Manas Ave. Bishkek Kyrgyzstan 720014
Email: tjdandcrbc_jv@163.com

Annexure 6 – Environmental Monitoring Results (Karakol WWTP)

(i) Ambient Air Quality



Аттестат аккредитации
№KG417/КЦА.ИЛ.049
от 12.08.2022

КЫРГЫЗ РЕСПУБЛИКАСЫНЫН ЖАРАТЫЛЫШ РЕСУРСТАРЫ,
ЭКОЛОГИЯ ЖАНА ТЕХНИКАЛЫК КӨЗӨМӨЛ
МИНИСТРЛИГИНЕ КАРАШТУУ
ЭКОЛОГИЯЛЫК МОНИТОРИНГ ДЕПАРТАМЕНТИ

ДЕПАРТАМЕНТ ЭКОЛОГИЧЕСКОГО МОНИТОРИНГА
ПРИ МИНИСТЕРСТВЕ ПРИРОДНЫХ РЕСУРСОВ, ЭКОЛОГИИ И
ТЕХНИЧЕСКОГО НАДЗОРА КЫРГЫЗСКОЙ РЕСПУБЛИКИ

720005, г. Бишкек, ул. Байтик-Баатыра, 34

тел. (312) 54-61-26

ПРОТОКОЛ ИСПЫТАНИЙ ПРОБ АТМОСФЕРНОГО ВОЗДУХА

№ 1 - 4

1. Наименование предприятия, организации (заявитель):

Иссык-Кульская область, г. Каракол, ОсОО «Nayat Group».

2. Регистрационный номер и место отбора проб:

1 – пруд №4, северо-восточная сторона очистные сооружения (О.С.),

(ш) 42° 53' 816'' (д) 78° 36' 407'';

2 – граница между прудом №3 и №2, восточно-северная сторона О.С.,

(ш) 42° 53' 959'' (д) 78° 36' 520'';

3 – пруд №1, восточная сторона О.С., (ш) 42° 53' 944'' (д) 78° 36' 618'';

4 – Вблизи с по поселком, (ш) 42° 54' 158'' (д) 78° 36' 701''.

3. Дата и время отбора проб:

11.01.2024г с 14часов 30мин.

4. Нормативный документ:

ГОСТ 17.2.4.06 – 90 «Охрана природы. Атмосфера. Методы определения скорости и расхода газопылевых потоков, отходящих от стационарных источников загрязнения». ГОСТ 17.2.4.07 – 90 «Охрана природы. Атмосфера. Методы определения давления и температуры газопылевых потоков, отходящих от стационарных источников загрязнения».

5. Дата(ы) проведения испытаний:

12.01.2024г.

Наименование определяемого показателя	НД на метод испытаний	Код пробы	Данные анализа по точкам, мг/м ³	ПДК* макс. раз., мг/м ³	Испытания провел	Испытания проверил
Диоксид серы	РД 52.04.186-89	03-01-24	0,185 ± 0,022	0,5	Жолдошбекова З.Ж.	Райкеева Р.Н.
Диоксид азота	РД 52.04.186-89	03-01-24	0,152 ± 0,027	0,085		
Оксид углерода	СТП ДЭМ 03-01-2021, СТП ДЭМ 03-02-2021	03-01-24	0,8 ± 0,16	5,0		
Взвешенные вещества	РД 52.04.186-89	03-01-24	0,158 ± 0,040	0,5		
Наименование определяемого показателя	НД на метод испытаний	Код пробы	Данные анализа по точкам, мг/м ³	ПДК* макс. раз., мг/м ³	Испытания провел	Испытания проверил
Диоксид серы	РД 52.04.186-89	03-02-24	0,040 ± 0,005	0,5	Жолдошбекова З.Ж.	Райкеева Р.Н.
Диоксид азота	РД 52.04.186-89	03-02-24	0,139 ± 0,025	0,085		
Оксид углерода	СТП ДЭМ 03-01-2021, СТП ДЭМ 03-02-2021	03-02-24	1,0 ± 0,2	5,0		
Взвешенные вещества	РД 52.04.186-89	03-02-24	0,237 ± 0,059	0,5		

Неопределенность измерений: Неопределенность измерений, возникающая в результате отбора проб, включена в расширенную неопределенность измерений.

Указанная расширенная неопределенность получена из суммарной стандартной неопределенности путем умножения на коэффициент охвата k=2, который обеспечивает уровень доверия приблизительно 95%

Заключение*: По результатам проведенных испытаний атмосферного воздуха превышений предельно-допустимой концентрации (ПДК) максимально разовой, обнаружено по диоксиду азоту: в точке №1 – 1,8 раз; в точке №2 – 1,6 раз; в точке №3 – 1,8 раз; в точке №4 – 1,8 раз. Остальные испытания в пределах установленных норм.

*- Вне аккредитации

Протокол оформила:
Заведующая ОАМКОП

Протокол испытаний касается только образцов, подвергнутых испытаниям
Исполнитель не несет ответственности, если проба отобрана самим заказчиком
Перепечатка протокола без разрешения испытательной лаборатории запрещена.



Дарбакова А.С.

Конец протокола.

(ii) Noise Levels

Санитарно-гигиеническая лаборатория

КАРАКОЛЬСКИЙ МЕЖРАЙОННЫЙ ЦЕНТР ПРОФИЛАКТИКИ ЗАБОЛЕВАНИЙ
И ГОССАНЭПИДНАДЗОРА при МЗ КР

722060 г. Каракол, ул. Мичурина, 4

тел. 4-09-85; 4-09-70

Место размещения знака
аккредитации

Лаборатория не имеет аккредитацию
на виды испытания, помеченные звездочкой (*)

ПРОТОКОЛ
ЛАБОРАТОРНЫХ ИЗМЕРЕНИЙ ШУМА
НА РАБОЧИХ МЕСТАХ, ЖИЛЫХ И ОБЩЕСТВЕННЫХ ЗДАНИЯХ
№ 89а
от «10» июня 2024года

1. Наименование объекта: ОсОО "Хайат-Групп"
2. Дата и время проведения измерения: 03.06.2024
3. Адрес и место проведения измерения: Очистное сооружение г Каракол
4. Характеристика помещения, в котором проводились измерения: Строительный лагерь
(размеры,объем,оборудование,этаж,)
5. Цель проведения измерения: санитарно – гигиеническая оценка.
6. Особые условия, влияющие на результаты измерений: T-22°C, P-45,2%
(температура,относительная влажность, скорость движения воздуха)
7. Измерение проводились в присутствии: Эколог Букарова А
представителя обследуемого объекта должность, Ф.И.О
8. Нормативный документ на метод выполнения испытания :ГОСТ 23337-2014 «Шум. Методы измерения шума на селитебной территории и в помещениях жилых и общественных зданий».
9. Наименование действующего нормативного документа: Постановление Правительство САНИТАРНО-ЭПИДЕМИОЛОГИЧЕСКИЕ ПРАВИЛА И НОРМАТИВЫ. «Шум на рабочих местах, в помещениях жилых, общественных зданий и на территории жилой застройки №201 от 11.04.2016г приложение №14.
10. Средства измерений, применяемые при отборе, тип, марка, заводской номер, сведение о поверке : Шумомер Октава 110А , зав.№ свидетельство о поверке №644 ВА1907008 от 24.04.2023г

2024/7/23 09:49

Стр 1 из 2


Результаты измерения шума:

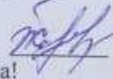
№ п/п	Описание Место измерения(ситуационный план территории с указанием расположения зданий, транспортных дорог, источников шума точек измерения).	Характер шума						Уровни звукового давления в ДБ в октавных полосах со среднегеометрическими частотами в Гц										Уровень звука дБА фактически	Предельно допустимый уровень звука дБА (ПДУ)
		По спектру		По временным				31,5	63	125	250	500	1000	2000	4000	8000			
		широкополосный	тональный	постоянный	колеблющийся	прерывистый	импульсный												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
1	Строительный лагерь	+		+				107	95	87	82	78	75	73	71	69		80	
								65,2	63,4	59,7	55,9	55,0	49,7	45,5	45,0	39,6	62,0		
2	Старое котельное	+		+				107	95	87	82	78	75	73	71	69		80	
								72,0	70,4	60,2	64,3	65,1	66,0	61,0	58,7	55,8	61,2		
3	Строй площадка	+		+				107	95	87	82	78	75	73	71	69		80	
								71,9	71,7	61,4	51,8	51,8	50,9	47,3	45,7	41,5	66,3		
4	Офис	+		+				107	95	87	82	78	75	73	71	69		80	
								53,6	45,8	44,4	39,8	41,9	44,0	39,9	37,1	36,8	60,2		
5	Поселок геологов	+		+				107	95	87	82	78	75	73	71	69		80	
								50,9	45,5	42,3	36,3	35,4	36,6	35,4	35,5	36,5	60,1		

Расширенная неопределенность измерения указывается как суммарная стандартная неопределенность измерения, умноженная на коэффициент охвата $k=2$, что вероятность охвата соответствует приблизительно 95%. Неопределенность измерений, возникающая в результате отбора проб, не включена в расширенную неопределенность измерений.

Измерение проводили:

Врач-лаборант
Техник:


 Сагынбаева Э.С.
Асангазиев А.У.

Заведующая санитарно-гигиенической лабораторией:  Табалдиева Ж.У.
Конец протокола!

Примечание: Результаты измерения относятся только на момент обследования.

Перепечатка протокола без разрешения санитарно-гигиенической лаборатории ЗАПРЕЩЕНА !

Заключение по результатам измерения: В исследованном участке
уровень шума не превышает ПДУ и отвечает требованиям
должность Т.А. КР 0501 прил 14 подпись _____

Сек. врос! 

2024/7/23 09:50

Стр 2 из 2

Annexure 7 – EHS Training Information

Training for Construction Labours- Balykchy WWTP

30.05.2024г.

участок КОС Балыкчы

Тренинг

Тема: Мероприятия по охране окружающей среды и ОТ и ТБ, пожаробезопасности.

Проведены тренинг на строительной площадке КОС для работников. На тренинге участвовали китайских работников 11 человек, Пакистанских работников 10 человек.

На тренинге рассмотрены следующие вопросы:

1. Обязанности работников по соблюдению правил ОТ и ТБ, и пожаробезопасности.
2. Обеспеченность работников спец одеждой и СИЗ, и правильное применение.
3. Всегда носит каску, защитный очки и.т.д.
4. Качественно выполнить работу.
5. Обращение с отходами (ТБО и строительные отходы, обтирочные материалы),
6. Санитарное экологическое состояние на строительном участке.
7. Обращение с растительным и животным миром на усатке КОС и прилегающих территориях.

Тренинг провели специалист ОТ и ТБ Чжан Сунг,
специалист по ООС Сагинов. С.

Переводчик для работников Пакистана Насыр

Список работников, участников тренинга прилагается.

Специалист ОТ и ТБ
Специалист ООС
Переводчик

Zhang Song
Sagynov S.
Nasyr

Джан Сунг
Сагинов С.
Sajjad Ahmad.

Список участников на тренинге по ТБ, ОТ,
и ООС. Для иностранных работников (Пакистан)

30.05.2024г.

1. سادیہ = SADIA
2. نوول م = Noor-M
3. AMRIAZ AMRIAZ
4. YASIR -
5. Bashir -
6. Sabeer -
7. Fojazulqunia
8. RAJKUMAR
9. NABEER
10. M-Ishtiaq

переводчик Sajjad Ahmed
специалист ООС Сагитов.С.
инспектор по ТБ, ОТ. Дхан Синг

Benz
Zhang Song

Training

Subject: Environmental, Health, Safety and Fire protection activities

A training session for the workers was conducted on WWTP site. 11 Chinese workers and 10 Pakistani people attended the training.

The following topics are reviewed during the training:

1. Obligations of employees to comply with HSE and fire safety regulations.
2. Provision of employees with special clothing and PPE and proper use of it.
3. Continuous use of helmet, goggles etc.
4. Performance of work with a proper quality.
5. Waste management (DSW, construction waste, cleaning cloth).
6. Sanitary and environmental conditions at the site
7. Handling of flora and fauna at WWTP site and adjacent areas.

The training is provided by HS Specialist Zhang Song, Environmental Specialist S. Sagynov.

The interpreter for the Pakistani workers is Nasyr.

The list of workers-attendees is attached.

HS Specialist	(signed)	Zhang Song
Environmental Specialist	(signed)	S. Sagynov
Interpreter	(signed)	Sajjad Ahmad



Toolbox talk – Balykchy WWTP (30th May 2024)

Training for HSE staff – Karakol WWTP

ПРОТОКОЛ

Тренинга «Соблюдение требований по ООС, ТБ и ОТ согласно законодательства КР и АБР» проведен 31^{го} мая 2024 г. строительный лагерь КОС Каракол. Основные темы тренинга:

Присутствовали: 2 человека

31 мая 2024 года в строительном лагере КОС Каракол был проведен тренинг для представителей подрядной организации Хаят групп.

Целью тренинга было:

- Мониторинг состояния ОС
- Требования к обустройству строительного лагеря согласно ПУОСКО и требованиям национального законодательства.
- Мероприятия по охране труда и технике безопасности (наличие СИЗ, обеспечение горячим питанием и водой на строительной площадке)

Тренинг проводила специалист по ООС, ТБ и ОТ компании Темельсу инжиниринг К -Зинина О.В.



Вводная часть тренинга состояла в ознакомлении персонала подрядной организации с основными требованиями законодательства КР и политики АБР.

В связи с тем что демонтажные работы уже начались, основное внимание на тренинге уделялось требованиям к безопасности рабочих, мероприятиям прописанным в ПУОСКО к обустройству строительного лагеря и строительной площадке, мониторинг строительной площадки.

Основные темы проведения тренинга:

1. Основные темы тренинга:
2. Мониторинг состояния ОС
3. Требования к обустройству строительного лагеря согласно ПУОСКО и требованиям национального законодательства.
4. Мероприятия по охране труда и технике безопасности (наличие СИЗ, обеспечение горячим питанием и водой на строительной площадке)

Список участников

№ п/п	Ф.И.О.	Должность	Подпись
1	Букарова Анара Кудайбергеновна	Местный специалист эколог Подрядчика ОсОО «Науат Групп»	
2	Кожобаев Керимбек Макембаевич	Инженер От и ТБ Подрядчика	



Training "Compliance with HSE requirements of the Kyrgyz regulations and ADB" is provided on the 31st of May 2024 in the construction camp of Karakol WWTP. The key training topic:

Attendees: 2 people

The training was held for the representatives of Hayat Group (the Contractor) in the construction camp of Karakol WWTP on May 31, 2024.

Purpose of training:

- Environmental monitoring
- Requirements for arrangement of a construction camp according to SSEMP and national legal requirements.
- Occupational health and safety measures (availability of PPE, provision of hot meals and water at the construction site)

The training was provided by HSE Specialist of Temelsu Engineering Co. - O. V. Zinina.

The introductory part of the training included familiarization of the contractor's staff with the basic requirements of the Kyrgyz legislation and ADB policy.

Since the dismantling works had been already started, the main focus of the training was on the requirements for the safety of workers, SSEMP requirements for the arrangement of the construction camp and the construction site, monitoring of the construction site.

The key training topics include:

1. The key training topic:
2. Environmental monitoring
3. Requirements for arrangement of a construction camp according to SSEMP and national legal requirements.
4. Occupational health and safety measures (availability of PPE, provision of hot meals and water at the construction site)

List of participants		Position	Signature
No.	Full name		
	Anara K. Bukarova	National Environmental Specialist of the Contractor Hayat Group Ltd.	(signature)
	Kerimbek M. Kozhobaev	HS Engineer of the Contractor	(signature)

Annexure 8 – ToR for Community Liaison Officer (CLO)

Loan №3742-KGZ/Grant №0628-KGZ: Issyk-Kul Wastewater Management Project Terms of Reference Community Liaison Officer of the Project Implementation Unit in Karakol

A. Background

The Kyrgyz Republic received funding from the Asian Development Bank (ADB) for the implementation of the “Issyk-Kul Wastewater Management Project” (hereinafter referred to as the Project). The State Institution “Drinking Water Supply and Sewerage Development” (SIDWSSD) is the Project Executing Agency. The Project will provide support to the Cabinet of Ministers of the Kyrgyz Republic in improving the efficiency of wastewater services in two cities located in the eastern part of the country in the coastal zone of Lake Issyk-Kul. The Project will upgrade and expand existing wastewater treatment systems, strengthen institutional capacity and improve the sustainability of public water supply and sanitation services (WSS) in Balykchy and Karakol cities.

1. Major project outputs include the following:
2. **Output 1: Balykchy and Karakol wastewater systems Improved**, including: (i) modernization of Wastewater Treatment Plants in Balykchy (capacity 4,200 m³/day) and Karakol (capacity 12,000 m³/day) cities, (ii) construction of 43.4 km sewer networks (iii) construction of 0.2 km effluent discharge pipeline and rehabilitation of 28 manholes of the main collector, (iv) construction of 50m³ wastewater receiving tank, (v) desludging a reservoir (SSP) and oxidation ponds by 100,000 m³ of sludge in Karakol and Balykchy cities and rehabilitation of the Karakol Irrigation Pumping Station (vi) procurement of special machinery.
3. **Output 2: Institutional capacity strengthened** and project Implementation Improved in Balykchy and Karakol through (i) a corporate capacity development program, (ii) targeted training modules in basic corporate knowledge, Operation & Maintenance, and financial management and billing systems, and (iii) twinning with an international water supply and sanitation knowledge-based facility.
4. **Output 3: Septage management Improved and environmental awareness promoted** through programs to (i) strengthen the septage management regulatory framework, rationalize septage collection services, and Improve septage disposal practices, and (ii) enhance sanitation best practice awareness, and encourage stakeholder support for the wastewater Improvements.

B. Scope of work

The Community Liaison Officer of PIU in Karakol will be responsible for the implementation, monitoring, full documenting and reporting on public awareness and PR activities and social safeguards within the framework of the Project in Karakol. During implementation, the Community Liaison Officer must consider and apply gender approaches. This Terms of Reference describes the duties and responsibilities of this Community Liaison Officer.

C. Detailed tasks and/or expected outputs

- Assist PMO, Karakol PIU in planning, managing, as well as implementation of the public participation and public awareness raising program;
- Develop plans, awareness raising programs, conduct trainings, , implement public consultation meetings and public awareness raising programs, for the Karakol PIU, Geolog village residents and Contractors with preparation of minutes and reports;
- Assist, advise the Karakol PIU and Contractors on the management and coordination of the implementation of public health and sanitation awareness rising programs, organize and

implement public health and sanitation awareness rising programs with preparation of minutes and reports;

- Develop and implement specific measures to ensure the participation of vulnerable groups, including women and the poor;
- Plan, organize, and conduct regular trainings, including meetings and seminars, throughout the Project with preparation of materials, minutes and reports;
- Prepare information, education and communication (IEC) materials, promotional videos, etc. for the Public Health and Sanitation Awareness Rising Program and other necessary issues;
- Conduct consultations and campaigns on public awareness raising about the Project, which may include but not be limited by the following: (i) Project review; (ii) advantages of connecting to the sewer system; (iii) importance of payment for water supply and waste water services; (iv) use and preservation of water resources; (v) procedures and expenditures for sewer pipeline connections and wastewater; (vi) environmental and social problems the likelihood of emergence of which may take place during the construction and operation of the WWTP and sewer pipelines of Karakol city;
- Monitor odor levels (during construction of project sites) using a portable gas analyzer and maintain appropriate records. In case of complaints from residents of nearby settlements regarding an unpleasant odor, the recorded data/information should be verified to resolve the problems; after agreement with the PMO, Karakol PIU and DSC, inform and recommend to the WWTP Contractor and Karakol Vodokanal Enterprise measures to eliminate the unpleasant odor, conduct monitoring and provide reporting on the implementation of measures; inform the complainant about the results of the measures taken;
- Monitor the results and impact of public participation on the ground, and make adjustments to the program if necessary; analyze reports from the field and provide advice to the Karakol PIU, Contractor and DSC on necessary actions, and implement necessary actions with documenting (preparation of minutes, reports, surveys); prepare quarterly reports on the results and impact of public participation;
- Conduct campaigns on raising public awareness on sanitation and hygiene, where at least 50% of the Project households, institutional and commercial facilities are included, of which at least 50% are represented by women and girls of school age with submission of reporting materials;
- Ensure the functioning of the Grievance Redress Mechanism (GRM) and timely and effective redressal of grievances, if any, with preparation of all documents (minutes, reports, photo-, video-, audio materials, information sheets, maintain grievance redress log book);
- Assist Grievance Redressal Committees (GRC) at local level in redressal of grievances, if any, preparation of minutes and reports on the work of committees;
- Providing information about the project to the community in a timely and appropriate manner and creating favorable relationships and interactions with the target audience;
- Organize various special events for interaction, informing and raising awareness of government authorities with full documenting and reporting;
- Provide input to semi-annual social and environmental monitoring reports and update information related to the status of the project grievances and complaints.
- Other relevant tasks as may be determined by the PMO Director and PIU Manager.

D. Minimum Qualification Requirements

The applicant for this position must have the following knowledge and experience:

- University degree or relevant professional experience;
- Ability to work on issues that may lead to conflict or be emotionally charged;
- Communication skills and ability to work in a team;
- Excellent communication and facilitation skills;
- Fluency in Kyrgyz and Russian languages;
- Computer skills sufficient to maintain a database of complaints from community, prepare reports and present outputs.

Annexure 9 – SSEMP – Karakol WWTP

Site-Specific Environmental Management Plan for the proposed construction works at the
WWTP in Karakol city.

Project No: 50176-002

April 2024

KGZ: Issyk-Kul Wastewater Management Project, Design and Build of WWTP in Karakol
[IMP/ICB/CW-21/008](#)

Prepared by the Department of Construction and Engineering Infrastructure (DCEI) under the
State Agency for Architecture, Construction and Housing and Communal Services under the
Cabinet of Ministers of the Kyrgyz Republic

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<https://disk.yandex.ru/d/TEltoT22xzTb1w>

Annexure 10 - Respond to the letter of the initiative group of Geolog village

On the letterhead of the SI DWSSD
Unofficial translation

Date: 29.07.2024

Ref: 150/24

Asian Development Bank Kyrgyz Republic Resident Mission

The State Institution Drinking Water Supply and Sewerage Development under the Water Resources Service under the Ministry of Water Resources, Agriculture and Processing Industry of the Kyrgyz Republic (hereinafter referred to as SIDWSSD) hereby informs about the following.

In 2018, a draft Land Acquisition and Resettlement Plan (hereinafter referred to as LARP) was prepared for the Issyk-Kul Wastewater Management Project in accordance with the requirements and principles of the Asian Development Bank (hereinafter referred to as ADB) Policy Statement on Safeguard Measures (SPS 2009), national legislation (Constitution, Land Code, Civil Code, etc.) and relevant by-laws (hereinafter referred to as LSI), based on the results of detailed measurements and surveys, socio-economic studies, results of public consultations, as well as the results of asset valuation conducted in the preparatory phase of the project.

In the designated LARP preliminary noted about the negative impact on 10 households with land plots with a total area of 2.03 hectares, not built up land plot of 2826 m² on the right of fixed-term use - one household with permission to use thermal water for therapeutic and prophylactic purposes. Also in the proposed sanitary protection zone (hereinafter - SPZ), determined on the basis of the current LSI, were agricultural land plots with a total area of 217.8 thousand m², without structures built there.

№	Name	Address
1	Askat uulu Adil	Karakol, Geolog village, 20/1 Yntymak street
2	Yryskulov Aibek	Karakol, Geolog village, 20 Yntymak street
3	Kaliyev Bakhtiyar	Karakol, Geolog village, 300/1 Kydyr Ake str.
4	Omukeyeva Gulmira	Karakol, Geolog village, 300/2 Kydyr Ake str.
5	Vakhrameeva Tatiana	Karakol, Geolog village, 7 Yntymak street
6	Baibolotov Koichu	Karakol, Geolog village, 14 Yntymak street
7	Tashkenbaev Temirlan	Karakol, Geolog village, 4 Yntymak street
8	Kadyrov Janybek	Karakol, Geolog village, 13 Yntymak street
9	Mazymkanova Nurbubu	Karakol, Geolog village, 8 Yntymak street
10	Kyrbasheva Janyl	Karakol, Geolog village

Based on the conceptual design and the Master Plan of the new wastewater treatment plant (hereinafter - WWTP) of Karakol, the Contractor has prepared a project for establishing the SPZ for the new WWTP in Karakol. According to this project the SPZ is defined in the distance of 400 meters from the sources of pollution - industrial site, where the main facilities of the Karakol WWTP had been designed. Actual size of the SPZ of the Karakol WWTP has not changed and corresponds to the normative 400 m established by the national LSI, but the location of the SPZ boundaries has changed depending on the location of pollution sources. For Karakol WWTP, the tender has determined the treatment technology using activated sludge with separate aerobic digestion. The WWTP itself will be compact and biological ponds will not be involved in the wastewater treatment process.

This SPZ project received a positive conclusion of the state environmental expertise of the Issyk-Kul Regional Department of the Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic dated September 11, 2023. During construction of the Karakol WWTP, new technologies will be applied, which provide for a low level of atmospheric and noise impact on the environment. Most of the equipment will be located in tanks, which will mitigate the negative impact on the environment.

As per ADB policy, local communities were meaningfully consulted and provided opportunities for their participation in project planning and implementation. Community members were informed of the Project results in a timely and appropriate manner.

The Constitution of the Kyrgyz Republic guarantees the right of people to access information on the activities of state and municipal bodies in accordance with the procedure established by law. The Law of the Kyrgyz Republic “On Access to Information in the Possession of State Bodies and Local Self-Government Bodies of the Kyrgyz Republic” requires maximum openness of information and transparency of activities of state and local authorities. Thus, the Issyk-Kul Wastewater Management Project is implemented on the basis of transparency and openness.

Public consultations on the Karakol WWTP have been held several times. Preliminary information on the main technical content of the project, sanitary protection zone, resettlement policy framework in accordance with the ADB Policy, stages of LARP preparation and establishment of grievance redress mechanism were presented at the public consultations.

On October 31, 2023, public consultations on “Environmental Impact Assessment and Social Safeguards in the framework of the Karakol WWTP construction” was held in the Karakol Mayor’s Office. During the public consultations, the independent expert of the Contractor, the developer of the SPZ project, made a detailed presentation on the methodology and calculations of the SPZ, clarification of the SPZ boundary location, normative and estimated parameters of maximum permissible concentrations (MPC) of pollutants to the residents of Karakol city and Geolog village, as well as to all interested parties. In this regard, a notification letter was sent to the residents of Geolog village informing that their households are not located in the sanitary protection zone.

In addition, upon the recommendation of the ADB Handover Mission (February 19-28, 2024), the Executive Agency has initiated the selection of a Community Liaison Officer for the Karakol Project Implementation Unit (PIU), who will work directly with the residents of Geolog village on all areas of the project activities on a continuous basis, which will have a positive impact on consensus building and mutual understanding.

SIDWSSD also notes that citizen Kadyrov Kanybek, who contacted the ADB Resident Mission in the Kyrgyz Republic by e-mail, is not in the list of project-affected people.

In addition, Mr. Isanov Sabyr, a member of the Initiative Group of Geolog village, gave detailed explanations to the author of the appeal Mr. Kadyrov Kanybek about the issues of compensation in connection with the new size of the SPZ and coordinated actions with the Executive and Implementing Agencies to improve the social infrastructure of Geolog village within the framework of Issyk-Kul Wastewater Management Project and inadmissibility of disruption of the State Investment Program for construction of a new wastewater treatment plant in Karakol.

Director

/signed/

A.Zh. Shadmanov