Semi-annual Environmental Monitoring Report

Project Number: 48401-008 Loan Number: ADB Loan 3432-KGZ (SF) Grant Number: 0496-KGZ (SF)

Semi-annual Environmental Monitoring Report July to December, 2023

Kyrgyz Republic:

CAREC Corridors 1 and 3 Connector Road, Section 2B Epkin-Dyikan [Bashkugandy], Km: 89+500 – 159+200 Project

Prepared by:

Olga Syzonenko, International Environmental Consultant, Gentek International Engineering and Consulting Ltd. Zhumaliev Talantbek, local environmental specialist, Gentek International Engineering and Consulting Ltd. Bishkek, Kyrgyzstan: January 2024

Prepared for:

Ministry of Transport and Communications of the Kyrgyz Republic

Approved by: [Name and signature of Executive Agency staff]

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

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

Abbreviations

ADB	-	Asian Development Bank
ACP	-	Asphalt Concrete Plant
CAREC	-	Central Asia Regional Economic Cooperation
CSC	-	Construction Supervision Consultant
EMP	-	Environmental Management Plan
SSEMP	-	Site Specific Environmental Management Plan
PIU	-	Projects Implementation Unit
m	-	Meter
km	-	Kilometer
KR	-	Kyrgyz Republic
MPC	-	Maximum permissible concentration
MAC	-	Maximum Allowable Concentration
MoTC KR	-	Ministry of Transport and Communication of KR
MF KR	-	Ministry of Finance of the Kyrgyz Republic
MoCT KR	-	Ministry of Culture and Tourism of the Kyrgyz Republic
MNRETS KR	-	Ministry of Natural Resources, Environment and Technical Supervision of the Kyrgyz Republic
NTAETS	-	Naryn Territorial Administration for Environmental and Technical Supervision under MNRETS KR
DPSSESD	-	Disease Prevention and State Sanitary and Epidemiological Surveillance Department of the Ministry of Health of the Kyrgyz Republic
TR	-	Terms of Reference
SR	-	Safety Rules
FS	-	Feasibility Study
CSP	-	Crushing and Screening Plant
RME	-	Road Maintenance Enterprise
HCHS	-	Historical and Cultural Heritage Site;
EIA	-	Environmental Impact Assessment
LP	-	Labor Protection
HS	-	Health Safety
LLC	-	Limited Liability Company
HCHSPP	-	Historical and Cultural Heritage Site Protection Project
PPE	-	Personal Protective Equipment

Table of Contents

1.1 1.2 1.3 2. F	NTRODUCTION Preamble Headline Information Camps PROJECT DESCRIPTION AND CURRENT ACTIVITIES roject Description.	6 6 7
2.1.1	Project Section Location and Basic Design	.9
2.1.2	Work Scope under Contract	11
2.2 Pi	roject Contracts and Management	13
2.2.1	Project Contracts and Management	17
2.3 Pi	roject Activities during Current Reporting Period.	18
2.3.1	Road Construction Works	18
2.3.2	Quarries	29
2.3.3	Storage Areas (Spoil Areas)	31
2.3.4	Production Site Territory	33
2.3.5	Camp	37
2.4 D	escription of Any Changes to Project Design	41
2.5 D	escription of Any Changes to Agreed Construction Methods.	42
	ENVIRONMENTAL SAFEGUARD ACTIVITIES.	
a. Si	te Audits	53
3.2 Is	sues Tracking (Based on Non-Compliance Notices)	59
3.3 Tr	ends	66
3.4 U	nanticipated Environmental Impacts or Risks.	67
3.5 Sı	ummary of Appeals and Grievances	67
	RESULTS OF ENVIRONMENTAL MONITORING	
4.1.1 4.1.2 4.1.3 4.2 Tr	Noise and Vibration Impact Monitoring Surface Water Quality Monitoring. Air Quality Monitoring rends	70 70
4.3 Si	ummary of Monitoring Outcomes	71
4.4 M	aterial Resources Utilisation	72
4.5 W	aste Management	72
4.6 H	ealth and Safety	72
4.6.1	Community Health and Safety.	72
4.6.2 \	Norker Safety and Health	73
	3	

4.7	Training.	73
	SSEMP FUNCTIONING. SSEMP Review.	
6 6.1	GOOD PRACTICE AND OPPORTUNITY FOR IMPROVEMENT. Good practice	
6.2	Opportunities for Improvement.	75
	SUMMARY AND RECOMMENDATIONS. Summary.	
7.2	RECOMMENDATIONS.	77

Annexes:

- 1. Environmental Audit/Inspection Reports
- 2. Dust Suppression Plan, new revision
- 3. The permits on planting trees from related village governments
- 4. Instrumental Tests Reports, August and November 2023

List of Tables:

Table 1: Names of Villages along the Project Road Section	10
Table 2: Project Detalis	12
Table 3: Main organizations involved in the project	14
Table 4: List of Key Consultant's Employees	14
Table 5: List of Key Contractor's Employees	15
Table 6: Project Contracts and Management	16
Table 7: Quantities of main work performed for 01.07.2023 - 31.12.2023	18
Table 8: Contractor's work program for 2024	24
Table 9: Planned & actual main work item quantities	26
Table 10: Characteristics of Quarries.	31
Table 11 Storage Areas	32
Table 12: Tree species in the deciduous tree nursery of the "Kulanak" Forestry	44
Table 13: Tree species in the nursery of coniferous trees of Naryn forestry	48
Table 14: Inspections/Audits of the project area	53
Table 15: Overview on findings observed during July- December, 2023	59
Table 16: Summary of Issues Tracking Activity for Current Period	66
Table 17: Trends on issues observed, 3-4 Q 2023	67
Table 18: Instrumental Monitoring Dates	68

List of Figures:

Figure 1: Map of Epkin-Dyikan (Bashkugandy) Location	9
Figure 2: Topographic map of the area where the road section Epkin-Dyikan (Bashkuugandy) located.	
Figure 3: Project Organizational Structure and Management	13
Figure 4: Map of road sections with active construction work, July-December 2023	18
Figure 5: Site Works	23
Figure 6: Water intake points for dust suppression along a project road	27
Figure 7: Dust suppression on roads	28
Figure 8: GIS locations of the quarries' areas	30
Figure 9: Asphalt plant at the production site (km 148+630)	34
Figure 10: Camp site (km 148+630)	35
Figure 11 Crusher at the production site.	35
Figure 12: Bitumen pit. The bitumen pit is equipped with reinforced concrete liner and a floor prevent the infiltration of petroleum products into the soil	
Figure 13: The production site (km 106+300)	36
Figure 14: GIS location of the new construction camp and production area at km 106+300	37
Figure 15: The area of the additional construction camp (km 106+300)	40
Figure 16: CHHS information board	53
Figure 17: ADB review mission at the project site, October 2023	58
Figure 18 Status of Non-compliances and Corrective Actions.	66
Figure 19: Instrumental Monitoring on Project Road	70

1. INTRODUCTION

1.1 Preamble

1. This Report present the Semi - Annual Environmental Monitoring Review for the CAREC Corridors 1 and 3 Connector Road Section 2B Epkin (Km: 89+500) - Dyikan (Bashkugandy) (Km: 159+200) Project.

2. This report is the 10th EMR for the project covering the six-month period of the project work conducted during July – December, 2023.

1.2 Headline Information

3. The Kyrgyz Republic is a landlocked mountainous country, and regional trade is heavily dependent on road transport, which dominates the Kyrgyz transport system and heavily relies on road transport. The government of the Kyrgyz Republic asked the Asian Development Bank (ADB) to assist in financing the implementation of the CAREC Corridors 1 and 3 Connector Road Section 2B Epkin (Km: 89+500) - Dyikan (Bashkugandy) (Km: 159+200) Project.

4. The CAREC Corridors 1 and 3 (Epkin Road Section (km 89 + 500) - Dyikan (Bashkugandy) (km 159 + 200) Project aims to improve transport communication and market access in the Kyrgyz Republic. The Project will result in efficient movement of freight and passenger traffic along the CAREC corridors 1 and 3, improving the safety of both road users and pedestrians, and minimizing the road's environmental impact in terms of noise from passing traffic by reconstructing the asphalt pavement.

5. The Project will improve the following socio-economic indicators of the regions of the Kyrgyz Republic:

- Reduction of the passenger and freight transport cost between the southern and Issyk-Kul and Naryn regions by providing direct access.
- Reduction of transport costs due to reduced route and improved road conditions.
- Increased local and international traffic.
- Additional income opportunities for local residents.
- Creation of new jobs.
- Good condition of vehicles /Reduced operating costs

6. CAREC Corridor 1 connects the Russian Federation and Europe with the PRC; it is the only north-south highway that provides access from the central part of the Kyrgyz Republic to the rest of the country and beyond. Likewise, CAREC Corridor 3 connects the Russian Federation and Europe with Central East and South Asia. This is the only direct link between the southern and northern parts of the country, linking two large economic and agricultural centers - Bishkek capital and the country's second largest Osh town. Joining of these two CAREC corridors will link the southern regions (Batken, Jalal-Abad and Osh) with the northern regions (Chui, Issyk-Kul, Naryn and Talas) via a faster and safer alternative route and facilitate further access to international markets.

7. In connection of contractual changes, the original contractor was changed to perform construction work on the project section. The current contractor is China Railway No.5 Engineering Group Co., Ltd.; the contract was signed on September 23, 2021; the contracted work was commenced on January 15, 2022.

8. During the reporting period, activities included producing of materials for construction work such as asphalt concrete mix, concrete and crushed aggregate fractions, road maintenance, replacement of culverts, excavation of waste material from cuts, embankment; construction of subgrade, subbase and base layers; construction of binder course layer; the crushing and screening plant, the asphalt concrete plant have been installed and are operational etc. Instrumental monitoring rounds were conducted in August and in November.

9. This Report contains information on the status of activities related to the prevention adverse impacts on the environment. The observations, corrective actions, and mitigation measures presented in this report are based on a monthly visit-inspection on the project road and living and production facilities for the reporting period conducted by the Consultant's specialists.

10. All observed non-compliances are listed in section 3.3. (İssues Tracking); the inspection reports with findings communicated to the Contractor to undertake corrective actions are presented in Annex 1 hereto.

11. Based on the findings from previous and current audits, trends have emerged indicating poor environmental and safety performance by the Contractor, primarily due to recurring non-compliances. These same findings have persisted consistently across reporting periods. The recurring non-compliances have been associated with issues such as inadequate fire safety measures (including missing critical equipment and inadequate training), lack of cleanliness in the operational areas, failure to properly dispose of domestic waste in a timely manner, failure to wear full personal protective equipment (PPE) by personnel, and other similar observations. In order to eliminate recurring non-compliances, when monitoring the environment at the project site, additional explanations are provided to the contractor's personnel about the importance of complying with the requirements of the environmental protection and safety rules. In particular, the CSC participates in the contractor's trainings for its staff and tries to examine the causes and consequences in detail for each identified non-compliance in order to develop recommendations. With the start of the new construction period, the CSC will prepare a Corrective Action Plan outlining the measures that need to be implemented.

12. The Contractor shall understand and be consistent in meeting the environmental safeguard requirements. Preventive controls are to be applied to eliminate these non-compliances before they are occurred. Thus, it is strongly suggested that Contractor to increase focus on environmental safeguard performance. All identified non-compliances and environmental protection requirements are conveyed to the Contractor in writing after each environmental monitoring at the project site.

1.3 Camps

13. The first contractor's camp is located on km 148+630 on the municipal territory of Kuyruchuk Aiyl Okmotu, not far from the contractor's production base. The contractor received permits from Kuyruchuk Aiyl Okmotu to use this territory.

14. The first contractor's camp territory is currently completely built up. The camp is 2.0 hectares in total. The camp contains offices, a kitchen, a canteen, consultants' residential rooms, a laboratory, a dormitory for contractor's workers, a contractor's office, an equipment maintenance workshop, parking for cars and trucks; a line maintenance hangar, security room, transformer, waste bin area (domestic and food waste), decantation tank, outdoor toilet and shower.

15. The second contractor's camp is located on km 106+300 on the municipal territory of Cholpon-Aiyl Okmotu. The Contractor has obtained the necessary permits from the Cholpon-Aiyl Okmotu of Kochkor District and the Issyk-Kul-Naryn Regional Office of the Ministry of

Natural Resources, Environmental Protection, and Technical Supervision of the Kyrgyz Republic.

16. The second contractor's camp territory is completely built up and is 1.924 hectares. The camp contains dormitories for workers, parking facilities for cars and trucks, a workshop for vehicle repairs, a storage facility, garbage bins for domestic and food waste, a settling tank, a transformer, a security room, toilets, and showers.

2. PROJECT DESCRIPTION AND CURRENT ACTIVITIES.

2.1 **Project Description.**

2.1.1 Project Section Location and Basic Design.

17. The project road Epkin (89 + 500 km) - Dyikan (Bashkugandy) (159 + 200 km) is a 70kilometer highway from east to west. This section follows the existing road to Bashkugandy (km 159). The section belongs to the Naryn region, crosses a small western part of the Kochkor district but most of it is located in the Jumgal district. The road is in poor condition; the surface is uneven with numerous potholes covered with frequent transverse and longitudinal cracks, often with a network of cracks. There are forage and irrigation ditches, lowlands and hills with pastures along the project road section. The road follows the Jumgal River and crosses the Tugol-Sai River. The map of the project road is shown in Figure 1. Nearby villages located along the road section are listed in Table 1.

18. The road runs through the Kochkor valley, ascends to about 2600 m, which highest point is on the Kyzart Pass, after which it descends to the Jumgal depression. The section runs west to Bashkugandy village, passes through a series of settlements interspersed with agricultural fields with a two-lane roadway configuration. These western parts of the Kochkor district represent vast sections of agricultural land intended for agriculture and livestock husbandry. The high-mountainous part is the border between the Kochkor and Jumgal districts, as well as the border of the water-parting lines of the Chui and Jumgal rivers. This high point of the road is a pass point between mountain ranges running parallel east to west of Naryn Region. The area is characterized as hilly and mountainous and covered with grasses suitable for grazing.

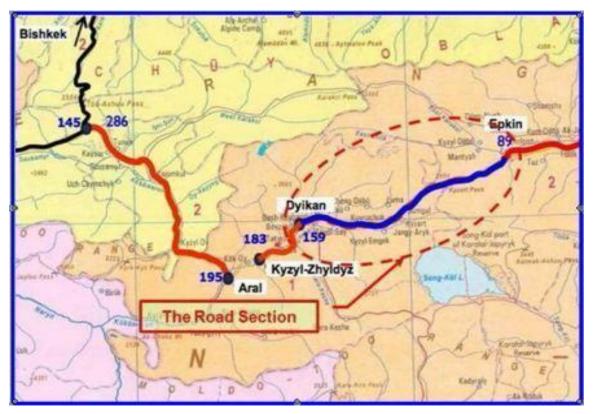


Figure 1: Map of Epkin-Dyikan (Bashkugandy) Location



Figure 2: Topographic map of the area where the road section Epkin-Dyikan (Bashkuugandy) is located.

Table 1: Names of V	Villages along	the Project Road Section	

Region	Region District		Section/km
Naryn	Kochkor (western part)	Epkin	89+500
	Jumgal	Jumgal	127+240 – 129+500
		Kuyruchuk	141+750 – 144+800
		Tugol-Sai	149+500 – 151+100
		Bashkugandy	159+000

19. Geotechnical conditions for subgrade construction on the road section between Epkin and Dyikan is favorable. The basic direction of the 70 km long road is laid mainly on the existing roadbed with gravel fill, in some places with asphalt pavement. The pavement is asphalt, mainly of 5–6 cm thick, rarely 9–10 cm. The pavement base is constructed of gravel, pebble and crushed stone soil with sandy loam and sandy aggregate.

20. The main works include earthworks, construction of culverts, reconstruction of the bridge in Tugol-Sai village (km 148+850) and asphalt pavement. In order to improve drainage systems, the work includes the reconstruction and replacement of most of the deteriorated irrigation culverts, as well as the new drainage structures construction.

21. Construction work is carried out mainly within the existing road's right-of-way, thus minimizing environmental impact. The Project includes a number of related activities, such as development of quarries, operation of the concrete plant and crushing and screening plant, the construction of a camp for workers and storage areas, etc.

22. In accordance with the Terms of Reference, the road pavement is designed for an initial design life of 10 years with options for structural overlay for a design life of 15 and 20 years.

2.1.2 Work Scope under Contract.

23. Details of the designed project road section:

- To restore and lay the project road to Technical Category II from Epkin (km 89) to Bashkugandy (km 159) in accordance with the National Standard of Kyrgyzstan with geometric and structural requirements with an estimated speed of 90 km/h outside settlements and 60 km/h in villages.
- Reconstruction, repair and/or replacement of bridges and culverts.
- Construction of side drains and other drainage structures.
- Provision of retaining walls and riverbed protection measures, if necessary.
- Provision of proper road signs and markings.
- Provision of protective guard-rails.

24. The road was designed in accordance with the Kyrgyz geometric design standard for Category II, and, accordingly, it must be sufficient to effectively withstand the load of transport during the projected service life. In fact, it will be a two-lane road consisting of the width of the roadway (the sum of the width of the lanes) and the width of the shoulder. The design elements for the project road's cross section are as follows:

- Number of lanes: 2
- Lane width: 3.5-3.75 m
- Carriageway width: 7.00-7.50 m
- Shoulder width: 3.25–3.75 m (of which 0.50–0.75 m asphalted)
- Total road width: 15.00 m

25. Detailed engineering designs have been prepared based on topographic surveys and geotechnical studies, as well as road surface, drainage structure and bridge conditions. International standards were applied to compensate for any deficiencies in national standards. The ADB-financed road section (Epkin-Bashkugandy) is a two-lane road with a pavement width of 6-8 meters (m), and mostly asphalt pavement in poor condition. About 70% of asphalt areas are in poor condition with potholes, cracks and broken edges, and some areas are already deteriorated down to gravel. The average roughness index is 8.33 m/km.

26. Operation of heavy and noisy machines in the vicinity of settlements was conducted during the daytime. No-vibration compaction method was utilized in residential areas and in close vicinity to cultural and historical heritage sites along the road.

27. The contract for the provision of construction supervision services was concluded between Gentek International Engineering and Consulting Limited and the Ministry of Transport and Communications of the Kyrgyz Republic on August 1, 2018.

28. The project provides for the construction and repair of the following engineering structures and communications, as well as the parameters of the scope of work.

- Asphalt pavement 103 963 m³;
- Binder with 9 cm thickness 62 225 m³;
- Wearing layer with 6 cm thickness 41 738 m³;
- Base, with 20 cm thickness 148 771 m³;
- Lower shoulder with 20 cm thickness 70 648 m³;
- Upper shoulder with 15 cm thickness 61 301 m³
- Subbase with 25 cm thickness 361 612 m³

Table 2: Project Detalis

From		о	Total Road Length				
Km 89+500	Km 15	9+200	69.7 Kr		n		
			Unsuitable ma	aterial from	269 29	1 m ³	
Excavation to dump	406 81	18 m³	Rock material	from cuts	136 86	0 m ³	
			Unsuitable demolition material		667 m ³		
			Common mat cuts		174 6	97 m³	
			Rock embank cuts		9 100	m ³	
Embankment	533 25	50 m ³	Common mat the quarry		186 66	3 m ³	
			Subgrade ma borrow		157 29	0 m ³	
			Common material for road signs and backfill		5 500 m³		
Subbase C grade, 0/40	364 667 m ³		Thickness on main road = 25 cm		361 612 m ³		
fraction			Thickness on ramps = 25 cm		3 055 m ³		
Lower shoulder C4	71 063 m ³		Thickness on main road = 20 cm		70 648 m ³		
grade, 0/70 fraction			Thickness on ramps = 15 cm		415 m ³		
Upper shoulder C10	62 131 m ³		Thickness on main road = 15 cm Thickness on		61 301 m ³		
grade, 0/40 fraction			ramps = 5 cm Thickness on main road		830 m ³		
Base I grade, 0/30 fraction	149 681 m³		= 20 cm			148 771 m ³	
			ramps = 15 cm Binder Thickness = 9 cm		910 m ³		
Asphalt pavement	103 963 m ³		Wearing layer		62 225 m ³		
			Thickness = 6cm		41 738 m ³		
Drainage Open drain Excavation for 20 258 m ³		Closed PVC drain		Closed drain, non-PVC 3 000 m			
		01 20 258 m ³	1 36	3 m	3 000	Jm	
Sulphate- resistant culverts, B30	D = 1.0 m	D = 1.5 m	D = 2.0x1.5 m	D=2.0x2.0 m	D=3.0x2.5 m	D=2x3.0x2.5 m	
	1 130 m	898 m	25 m	27 m	10 m	11 m	
Reinforcement	42.	91 t	Brid	dge	28.8	7 m	

2.2 Project Contracts and Management.

29. A scheme of the organizational structure and management of project activities is shown in Figure 3. Representatives of the main organizations involved in the project and related to environmental protection are listed in Table 3. List of the representatives currently involved in the organization and implementation of the project work have been updated and shown in Tables 4 and 5.

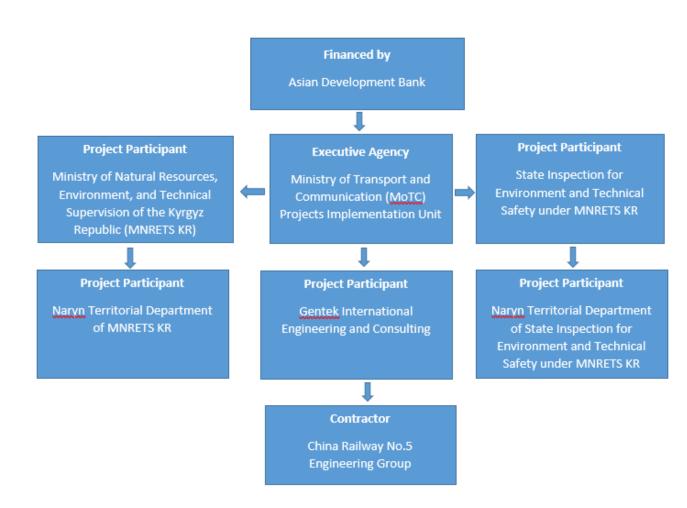


Figure 3: Project Organizational Structure and Management

Table 3: Main organizations involved in the project

N⁰	Name of company	Activities in the project	Responsible persons for environmental protection	Contact details
1	ADB	Country Environmental Focal	Ninette R. Pajarillaga	npajarillaga@adb.org
2	ADB	National Environmental Consultant	Sultan Bakirov	Sbakirov.consultant@adb.org
3	PIU MoTC KR	Environmental Specialist	Asylbek Abdygulov	asylbeka@piumotc.kg
4	Gentek Consulting Company	International Environmental Specialist	Olga Syzonenko	olga.syzonenko82@gmail.com
5	Gentek Consulting Company	National Environmental Specialist	Talantbek Zhumaliev	take0978@mail.ru
6	Contracting company: China Railway No. 5 Engineering Group Co., Ltd	Environmental Specialist	Nurlan Nurdinov	nnurdinov78@mail.ru

Table 4: List of Key Consultant's Employees

International Employees				
Senior Highway Engineer / Team Leader	Selcuk Mutlu			
Pavement and Materials Engineer	Mehmet Tokgoz			
Structural Engineer	Sabir Mehrabov			
Road Safety Engineer	Ercan Duymaz			
Social development and Resettlement Specialist	Saim Tuzlu			
Contract Specialist	Rufat Mammadov			
Environmental Specialist	Olga Syzonenko			
Quality Assurance Engineer	Alvan Jamalov			
National Employees				
Highway Engineer/Deputy Team Leader	Omurbek Shekeev			
Pavement and Materials Engineer	Ulanbek Alymkulov			
Structural Engineer	Nasyr Moldogaziev			
Quality Assurance Engineer	Rysbek Sultangaziev			
Quantity Engineer	Joodar Alymkulov			
Road Safety Engineer	Suiunbek Tokobaev			
Social and Resettlement Specialist	Omorbekov Azamat			
Environmental Specialist	Talantbek Zhumaliev			

INTERNAL. This information is accessible to ADB Management and staff. It may be shared outside ADB with appropriate permission.

Hydrological Drainage Specialist

Talaibek Ashymbekov

Table 5: List of Key Contractor's Employees

Nº	Position	Professional qualifications	Personnel		
	International Employees				
1	Project Manager	Road and Bridge Engineering	Zhang Liang		
2	Executive Deputy Manager	Road and Bridge Engineering	Hu Huihui		
3	Site Deputy Manager	Road and Bridge Engineering	Su Chenghong		
4	Civil Engineer	Transportations and Civil Engineering	Du Moufu		
5	Structural Engineer	Road and Bridge Engineering	Li Hong		
6	Equipment Plant Engineer	Mechanic Engineering	Li Xiaoke		
7	Engineering Department	Engineering	Zhang Zhongyi		
8	Materials Engineer	Engineering	Zhai Penghui		
9	Commerce Department	Engineering	Liu Linhai		
10	Surveyor	Engineering	Yu Jiansong		
11	Earthwork Team	Engineering	Zhao Xin		
12	Pavement Team	Engineering	Yang Tongfeng		
		Local Employees			
13	Environmental Specialist	Ecology and Nature Management	Nurlan Nurdinov		
14	Social Development and Public Relations Specialist	Road Engineering	Maksat Kamchybekov		
15	Archaeologist	History & Archaeology	Orozbek Soltobaev		
16	Traffic safety engineer	Engineering	Abylabekov Kozhomkul		

30. The details of the contract of the contracting company responsible for the road construction work are shown in table 6 below.

Table 6: Project Contracts and Management

Project	Kyrgyz Republic: CAREC Corridors 1 and 3 Connector Road Project		
Contractor	China Railway No.5 Engineering Group Co. Ltd.		
Road Section:	89+500 km - 159+200 km, total length 70 km		
Donor:	Asian Development Bank.		
Contract signing date:	23.09.2021		
Executive Agency	Ministry of Transport and Communications of the Kyrgyz Republic		
Commencement Notification			
Completion Date			
Completion period - days	2,5-years (30 month) or (900days)		
Time Extension - days	-		
Warranty period - days	3 years		
Contract Amount	US\$ 39,100,002.18		
The intermediate payment minimum amount, USD (2%)	2 % of the Accepted Contract Amount.		
The total advance payment amount	15 % Percentage of the Accepted Contract Amount payable in the currencies and proportions in which the Accepted Contract Amount is payable		
Bank guarantee amount	The performance security will be in the form of an unconditional bank guarantee in the amount of 10 % of the Accepted Contract Price.		
Third party insurance amount	1,000,000 US Dollars per occurrence with the number of occurrences unlimited		
Insurance submission deadlines	Periods for submission of insurance:		
a) insurance certificate	28 days		
b) relevant policies	28 days		
Penalties for late completion of work	0.05 % of the Contract Price per day, in the currencies and proportions in which the Contract Price is payable.		
Maximum amount of penalties for delay	10.0 % of the Contract Price.		
Reimbursement of depreciation and prepayment	30 %		
Limitation on deduction of money	10 % of the accepted Contract amount		
Retention rate	10 % of the amount of the Interim Payment Certificates		

2.2.1 Project Contracts and Management.

- 31. Relevant institutions working with the project include:
- Ministry of Finance of the Kyrgyz Republic (MF),
- Ministry of Transport and Communication of the Kyrgyz Republic (MoTC)
- Projects Implementation Unit (PIU) under MoTC KR,
- Ministry of Energy and Industry of the Kyrgyz Republic (MoEI)
- Ministry of Natural Resources, Environment and Technical Supervision of the Kyrgyz Republic (MNRETS)
- Department of Disease Prevention and State Sanitary and Epidemiological Surveillance of the Ministry of Health of the Kyrgyz Republic (DDPSSES).

32. MoTC is responsible for the development of the transport sector and is the Executing Agency (EA) for the project. MoTC has overall responsibility for planning, design, implementation and monitoring of the project. PIU works under MoTC and performs tasks assigned by the MoTC.

33. MF KR is the authorized government body responsible for coordinating with ADB and other donors regarding foreign aid issues.

34. MNRETS is the leading environmental state agency responsible for state policy in this area and coordinating the actions of other government agencies in these matters. Its functions include:

- development of environmental policy and its implementation;
- carrying out state ecological expertise;
- issuance of environmental licenses;
- environmental monitoring;
- provision of environmental information services.
- 35. MoEI monitors compliance with:
- I. environmental legislation, established rules, limits and norms for the use of natural resources, standards for emissions and discharges of pollutants and disposal of waste in the environment;
- II. industrial safety requirements for construction, expansion, reconstruction, technical reequipment, operation, conservation and liquidation of hazardous production facilities;
- III. requirements of land legislation;
- IV. safety requirements for equipment and facilities for storing and dispensing oil products and gases, lifting cranes;
- V. requirements for the rules of safe operation during construction, installation and adjustment of electrical networks and electrical equipment.

36. DDPSSES supervises the sanitary and epidemiological welfare of the population, safety of goods, products, environmental objects and conditions, prevention of the harmful effects of environmental factors on human health.

2.3 Project Activities during Current Reporting Period.

2.3.1 Road Construction Works.

37. During the reporting period, the following work has been carried out throughout the project area:

- Production of asphalt concrete mix, concrete and crushed aggregate fractions;
- Maintenance of the existing road (grubbing and clearing, installation of temporary road signs, appropriate measures considering season related complications: dust suppression in dry weather, application of anti-icing substances on roadway in winter);
- Existing asphalt pavement break up and removal;
- Cut excavation;
- Embankment;
- Construction om subgrade, subbase and base layers;
- Construction of binder course layer;
- Completion of installation of previously started culverts, as well as laying of new culverts.

38. Table 7 provides information on the quantity and percentage of work completed at the site from 01.07.2023 to 31.12.2023. The work was mainly carried out at the following sections of the construction road:

1) km 89+500 - km 95+000
2) km 106+000 - km 122+000
3) km 133+000 - km 136+000
4) km 137+200 - km 142+000
5) km 144+100 - km 148+700
6) km 148+847 - bridge and detour road
7) km 150+400 - km 159+200

Figure 4: Map of road sections with active construction work, July-December 2023

Table 7: Quantities of main work performed for 01.07.2023 - 31.12.2023

No.	Description	Unit	Total	Qnty	%	Completed Length	Remaining	% of
NO.	Description	Onit	qnty	Completed	Of completed	(km/total length)	qnty	remaining
01	Archaeological work	no.	81	81	100%		0	0%
02	Embankment	m3	374,000	267,000	71%		107,000	29%
03	Cut excavation	m3	338,000	151,000	45%		187,000	55%
04	Subgrade	m3	296,000	145,000	49%		151,000	51%
05	Subbase	m3	292,000	147,000	50%		145,000	50%
06	Base	m3	150,000	106,000	71%	49.7/69.7=71%	44,000	29%
07	Binder coarse	m3	62,000	40,500	65%	45.5/69.7=65%	21,500	35%
08	Wearing coarse	m3	41,300	8,200	20%	13.8/69.7=19.8%	33,100	80%
09	Shoulders	m3	133,000	22,500	17%		110,500	83%
10	Culvert (at the main road)	psc.	119	119	100%		0	0%

39. The Contractor's work plan is currently going through revision and approval process for the construction season in 2024, the plan in Table 8 below is the most recent one.

Below are the photo materials of the work being carried out.



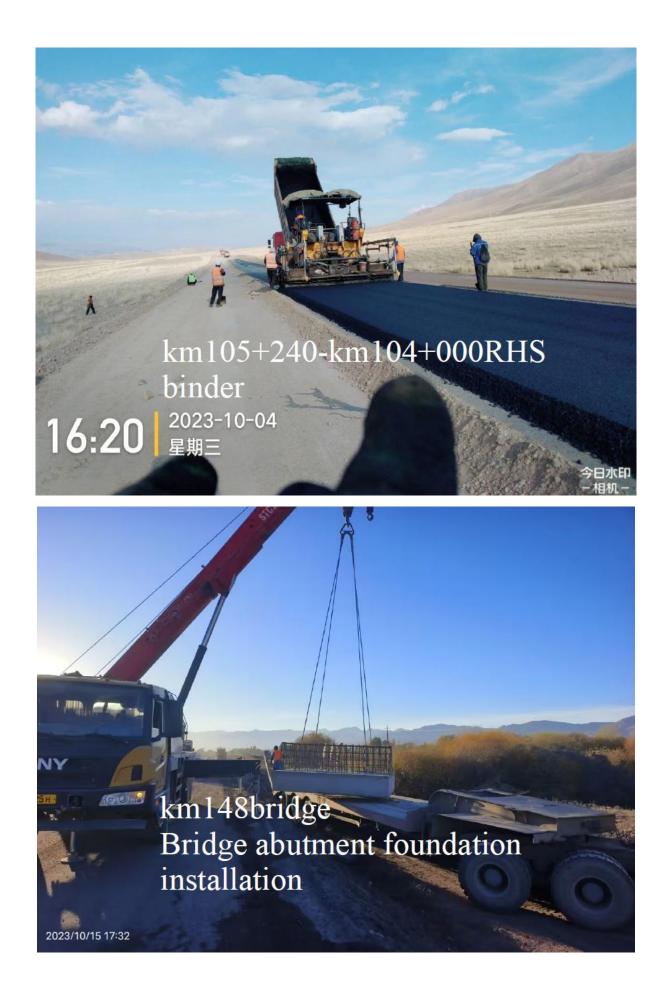




INTERNAL. This information is accessible to ADB Management and staff. It may be shared outside ADB with appropriate permission.







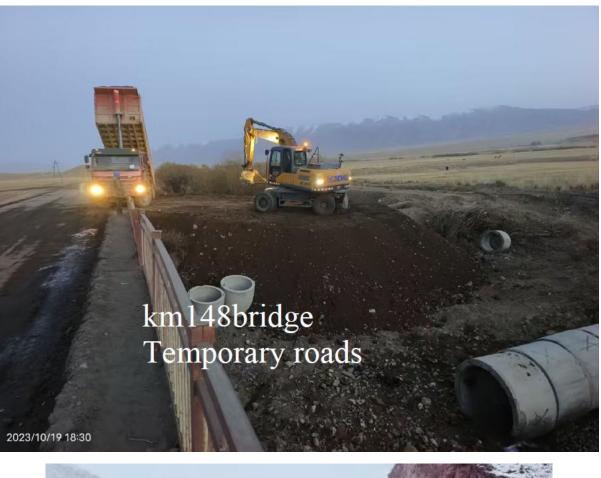




Figure 5: Site Works

N⁰	Work Description	Period	Start	End
1	Construction schedule for the Epkin–Dykan road (69.7 km)	99 days	2024/3/11	2024/7/3
2	Subgrade	45 days	2024/3/11	2024/5/1
3	Km 92+500 – 95+500	24 days	2024/3/11	2024/4/6
4	Km 112+700 – 119+400	45 days	2024/3/11	2024/5/1
5	Subbase	68 days	2024/3/11	2024/5/28
6	Km 106+240 – 111+020	20 days	2024/3/11	2024/4/2
7	Km 92+020 – 95+500	14 days	2024/4/11	2024/4/26
8	Km 112+000 – 124+020	48 days	2024/4/3	2024/5/28
9	Base	72 days	2024/3/11	2024/6/1
10	Km 89+500 – 91+980 and km 95+500 – 98+600 RHS	7 days	2024/3/11	2024/3/18
11	Km 106+240 – 111+020	12 days	2024/3/22	2024/4/4
12	Km 112+000 – 124+020	30 days	2024/4/6	2024/6/1
13	Km 91+980 – 95+500	9 days	2024/4/20	2024/4/30
14	Wearing coarse (Section A km 149+040 – 159+200)	13 days	2024/3/11	2024/3/25
15	Km 149+020 – 150+500	7 days	2024/3/11	2024/3/18
16	Km 157+000 – 159+200	6 days	2024/3/19	2024/3/25
17	Section A significant completion	0 days	2024/3/25	2024/3/25
18	Wearing coarse (Section B km 124+000 – 149+040)	39 days	2024/3/26	2024/5/9
19	Km 124+000 – 137+040	26 days	2024/3/26	2024/4/24
20	Km 142+020 – 144+100	10 days	2024/4/25	2024/5/6
21	Km 145+700 – 147+000	3 days	2024/5/7	2024/5/9
22	Section B significant completion	0 days	2024/5/9	2024/5/9
23	Safety facilities at km 124+000 – 159+200	42 days	2024/3/26	2024/5/15
24	Road signs	40 days	2024/3/28	2024/5/13
25	Road markings	42 days	2024/3/28	2024/5/15
26	Handover of works at sections A and B	0 days	2024/5/15	2024/5/15
27	Binder coarse (section C km 89+500 – 112+000)	41 days	2024/3/16	2024/5/2
28	Km 89+500 – 91+980 and km 95+500 – 98+600 RHS	6 days	2024/3/16	2024/3/22
29	Km 106+240 – 111+020	10 days	2024/3/29	2024/4/9

Table 8: Contractor's work program for 2024

INTERNAL. This information is accessible to ADB Management and staff. It may be shared outside ADB with appropriate permission.

30	Km 91+980 – 95+500	7 days	2024/4/25	2024/5/2
31	Binder coarse (section D km 112+000 – 124+010)	42 days	2024/4/16	2024/6/3
32	Km 112+000 – 124+010	42 days	2024/4/16	2024/6/3
33	Wearing coarse (section C km 89+500 – 112+000)	46 days	2024/3/23	2024/5/15
34	Km 89+500 – 112+000	46 days	2024/3/23	2024/5/15
35	Section C significant completion	0 days	2024/5/15	2024/5/15
36	Wearing coarse (section D km 112+000 – 124+010)	24 days	2024/5/16	2024/6/12
37	Km 112+000 – 124+010	24 days	2024/5/16	2024/6/12
38	Section D significant completion	0 days	2024/6/12	2024/6/12
39	Safety facilities at km 89+500 – 124+000	42 days	2024/5/16	2024/7/3
40	Road signs	40 days	2024/5/16	2024/7/3
41	Road markings	42 days	2024/5/16	2024/7/3
42	Handover of works at section C and D	0 days	2024/7/3	2024/7/3
43	Bridge (section E)	99 days	2024/3/11	2024/7/3
44	Prefabrication and hauling of the T-beam by the manufacturer	84 days	2024/3/11	2024/6/15
45	Construction pier cap	21 days	2024/3/11	2024/4/3
46	Demolition of existing structures	7 days	2024/6/8	2024/6/15
47	Beam installation and casting of the connecting part	14 days	2024/5/30	2024/6/14
48	Construction of a concrete barrier	7 days	2024/6/15	2024/6/22
49	Preparatory layer	5 days	2024/6/24	2024/6/28
50	Construction of bridge approaches	11 days	2024/6/21	2024/7/3
51	Bridge work handover	0 days	2024/7/3	2024/7/3
52	Ancillary work	99 days	2024/3/11	2024/7/3
53	Metal guard-railing	99 days	2024/3/11	2024/7/3
54	Lighting installation	63 days	2024/3/11	2024/7/3
55	Snow protection fence	99 days	2024/3/11	2024/7/3
56	Reinforced concrete barriers	99 days	2024/3/11	2024/7/3
57	Shoulder backfilling	99 days	2024/3/11	2024/7/3
58	Junctions	99 days	2024/3/11	2024/7/3
59	Longitudinal ditches	99 days	2024/3/11	2024/7/3
60	Sidewalks	99 days	2024/3/11	2024/7/3

INTERNAL. This information is accessible to ADB Management and staff. It may be shared outside ADB with appropriate permission.

61	Bus stops - pcs., restroom	99 days	2024/3/11	2024/7/3
62	Work handover	0 days	2024/7/3	2024/7/3

40. The statistics on main construction work planned and performed in accordance with the schedule are shown in table 9.

Table 8: Planned & actual main work item quantities

Work Item	BOQ Quantity	Planned Quantity	Actual Quantity	Planned %	Actual %	Variance %	Planned Completion Date
Drainage			1			1	1
Culverts (m)	1 688,27	1 688,27	1734	100%	100%	2.63%	01.08.2023
Open Drain (m3)	20 258,00	133	132	0,7%	0,7%	0%	01.05.2024
Subsurface Drain (m)	4 363,00	2600	2768	59,59%	63,44%	-3,85%	
Retaining Walls							
Concrete Walls (m3)	232.00	26	26	11,21%	11,21%	0%	
Earthworks	- 1	1	1	1		1	1
Clear & Grub (ha)	40,97	14,03	13,92	34,24%	33,98%	0,27%	31.07.2023
Cut Excavation (m3)	338 226,09	140 789,16	139 553,56	41,63%	41,26%	0,37%	31.08.2023
Embankment (m3)	3740 76,35	226 533,16	225 185,36	60,56%	60,20%	0,36%	31.08.2023
Subgrade (m3)	285 707,34	140 831,88	138 845,58	49,29%	48,60%	0,70%	13.10.2023
Pavement	1		1	1		1	1
Sub base (m3)	292 447,30	28000	115 354,15	95,7%	39,5%	0%	13.10.2023
Base (m3)	149 681,00	145000	97 860,18	96,85%	65,4%	0%	26.10.2023
Low. Shoulder (m3)	71 063,00	4000	3 452,73	5,6%	4,9%	0,7%	06.11.2023
Up. Shoulder (m3)	62 131,00	-	-	-	-		10.05.2024
Shoulder Total (m3)	133 194,00	4000	3 452,3	3%	2,6%	0,4%	20.06.2024
Binder (m3)	61 965,00	13000	12 290,22	20,9%	19,8%	1,1%	20.06.2024
Wearing (m3)	41 998,00	10 028,37	6 978,38	24,3%	17%	7,3%	29.04.2024
Asphalt Total (m3)	103 963,00	13 000	12290,22	12,5%	11,8%	0,7%	31.05.2024
Bridge 1 over Tugol- Sai river							
Foundation (%)					0%		

Foundation (%)			0%	
Substructure (%)			0%	
Superstructure (%)			0%	

26

41. The delay in completing The Contractor's work plan for Year 2023 can be attributed to several factors, including: a) intense rains and early cooling in the region in September 2023; b) relocation of additional supports for the power line; and c) construction of additional horizontal structures. Additionally, some logistical issues, such as the inability to establish a proper bitumen supply chain due to increased customs control on the Russian-Kazakh border, have impacted the project implementation schedule. As the work plan for Year 2024 is currently being revised, the availability of existing assets required to complete the work plan will be evaluated in the revised indicative work plan.

42. During the late autumn and winter the ambient temperature drops below 5^o C that is not suitable weather for asphalt construction. Activities in the middle of November and December 2023 were mainly consisted of construction of structures, subgrade, rock excavation, production and storage of crushed stone materials, and winter maintenance of road.

43. High dust formations due to dry weather are heavily impacting air quality as well as increasing traffic risks. Therefore, dust suppression is carried out to mitigate impact and risks in the areas where construction works are being carried out and in the roads in vicinity of the settlements located along the project site. The dust suppression plan was updated on 30th June 2022 considering increasing number of water tanks utilized in summer. The plan is attached in Annex 2.

44. 8-10 water trucks were utilized to suppress high dust during summer, whereas 4-6 trucks were used in the autumn; in winter dust suppression is being executed using 3 water trucks. In winter, water tankers are used at the project site depending on weather conditions, i.e. daily if necessary.

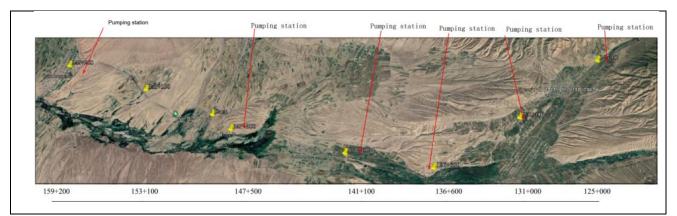


Figure 4: Water intake points for dust suppression along a project road

45. The water used for dust suppression is taken from the points of Tugol-Sai river, Canal on the left side (km 147+540), Zhumgal river, Kyzart river, and Kara suu in the vicinity of the Bash-Kuugandy, Tugol-Sai, Kuiruchuk, Zhumgal, and Ak-Uchuk villages.





Figure 5: Dust suppression on roads.

2.3.2 Quarries.

46. On the project road (Epkin-Dyikan section, km 89-159), 17 sites were allocated for quarries. The Contractor received all the necessary permits/approval from local authorities, and the Ministry of Natural Resources, Environment and Technical Supervision of the Kyrgyz Republic (MNRETS KR). The MoTC KR received an entrusted permit for all quarry sites from the State Committee for Industry, Energy, and Subsoil Use under the Government of the Kyrgyz Republic (SCIESU under GKR). Table 10 shows the quantity of major works performed during the period from 01.07.2023 to 31.12.2023.

47. During the reporting period, the Contractor obtained permits for the development of new quarries at km 106+420, 104+158, and for the expansion of the quarry at km 110+900, namely Cholpon village government's Letter Ref.: 02-1-34/1495 dated 20.09.2023; Letter Ref.: 01-1/1018 dated 26.09.2023 from NTAETS; Cholpon village government's Letter Ref.: 02-1-34/1302 dated 16.08.23; Letter Ref.: 01-1/918 dated 29.08.23 from NTAETS;

48. The quarries' areas are in suitable condition. During the reporting period, seven quarries are operated: at km 148+630 (located in the Tugol-Sai village area), at km 140+990 (the Kuyruchuk village area), at km 135+280 (the Jany-Aryk village area), at km 119+300 (the Jumgal village area), at km 110+900 (the Cholpon village area), at km 106+420 (the Cholpon village area), and at km 100+800 (the Cholpon village area). GIS locations of the quarries' areas are shown below.



Quarry №14 (km 100+800)



Quarry №17 (km 106+420)



Quarry №7 (km 110+900)



Quarry №15 (km 119+300)



Quarry №10 (km 135+280)



Quarry №11 (km 140+990)



Quarry №12 (km 148+630) Figure 6: GIS locations of the quarries' areas

49. The main characteristics of the quarries are shown in Table 10.

				Object char	acteristics		
No.	Quarry	Up to Km by the road	About the road axis (m)	Production volume (m ³)	Area (ha)	Location of quarries	Note
1	Quarry №1	91+680	RHS 222 m	100 000	11.2	Cholpon v.	Not being developed
2	Quarry №2	92+630	RHS 550 m	200 000	15.6	Cholpon v.	Not being developed
3	Quarry №3	94+080	RHS 25 m	60 000	1.04	Cholpon v.	Not being developed
4	Quarry №4	100+790	RHS 85 m	150 000	1.8	Cholpon v.	Not being developed
5	Quarry №5	106+350	LHS 78 m	80 000	2.5	Cholpon v.	Not being developed
6	Quarry №6	106+420	RHS 250 m	150 000	3.3	Cholpon v.	Not being developed
7	Quarry №7	110+900	RHS 94 m	100 000	2.1	Cholpon v.	Being developed
8	Quarry №8	112+870	RHS 27 m	56 000	5.08	Semiz-Bel v.	Not being developed
9	Quarry №9	133+000	RHS 320 m	150 000	0.93	Jany-Aryk v.	Not being developed
10	Quarry №10	135+280	LHS 25 m	200 000	0.64	Jany-Aryk v.	Being developed
11	Quarry №11	140+990	LHS 212 m	97164.92	6.5	Kuyruchuk v.	Being developed
12	Quarry №12	148+630	RHS 1800 m	800 534.9	18360	Tugol-Sai v.	Being developed
13	Quarry №13	148+630 (extension)	RHS 1800 m	139 718,24	7,5	Tugol-Sai v.	Not being developed
14	Quarry №14	100+800	RHS 400 m	98 142,0	3,27	Cholpon v.	Being developed
15	Quarry №15	119+300	RHS 541 m	770 568,7	9,7	Jumgal v.	Being developed
16	Quarry №16	110+900 (extension)	RHS 274 m	90 000	1,5	Cholpon v.	Being developed
17	Quarry №17	106+420	RHS 274 m	62 000	0,62	Cholpon v.	Being developed

Table 9: Characteristics of Quarries.

2.3.3 Storage Areas (Spoil Areas).

50. All spoil areas used by the previous Contractor after the termination of the Contract were handed over to the local authorities (Ayil Okmotu) under the Handover and Acceptance Certificate. With the resumption of road construction by the new Contractor, the same spoil areas are used on the road section. Table 11 lists the characteristics of the areas approved for dumping.

Table 10 Storage Areas

Na	C	Dbject location		Duranta	
Nº	Km	Distance from the road	Village area	Remarks	
1	158+400	317 m RHS	Bash-Kuugandy		
2	158+540	108 m RHS	Bash-Kuugandy		
3	158+550	5 m LHS	Bash-Kuugandy		
4	157+300	150 m LHS	Bash-Kuugandy		
5	155+800	320 m RHS	Bash-Kuugandy		
6	154+800	186 m LHS	Tugol-Sai		
7	152+760	940 m LHS	Tugol-Sai	Denied	
8	152+760	87 m LHS	Tugol-Sai		
9	151+140	11 m RHS	Tugol-Sai		
10	150+960	66 m LHS	Tugol-Sai		
11	150+840	104 m RHS	Tugol-Sai		
12	150+100	30 m RHS	Tugol-Sai		
13	149+200	20 m RHS	Tugol-Sai		
14	149+000	RHS	Tugol-Sai	Private land	
15	148+200	35 m RHS	Tugol-Sai		
16	147+540	LHS	Kuyruchuk		
17	143+610	421 m – 694 m RHS	Kuyruchuk		
18	140+990	122 m LHS	Kuyruchuk		
19	138+600	45 m LHS	Kuyruchuk		
20	136+940	435 m RHS	Dzhany-Aryk		
21	132+860	315 m RHS	Dzhany-Aryk		
22	130+840	31 m RHS	Dzhany-Aryk		
23	121+620	49 m LHS	Dzhany-Aryk		
24	120+310	37 m LHS	Dzhany-Aryk		
25	117+520	78 m LHS	Dzhany-Aryk		
26	113+970	50 m LHS	Cholpon		
27	110+660	85 m RHS	Cholpon		

INTERNAL. This information is accessible to ADB Management and staff. It may be shared outside ADB with appropriate permission.

28	100+940	91 m LHS	Cholpon	
29	106+720	55 m LHS	Cholpon	
30	106+540	49 m RHS	Cholpon	
31	93+980	66 m RHS	Cholpon	
32	91+360	45 m RHS	Cholpon	
33	98+190	21 m LHS	Cholpon	
34	103+060	16 m RHS	Cholpon	
35	112+600	45 m LHS	Semiz-Bel	
36	113+970	33 m LHS	Semiz-Bel	
37	115+850	60 m LHS	Semiz-Bel	

51. In the reporting period of the project implementation, new storage areas were used:

1) km126+960: 50 m on the right side (Private land),

2) km128+000: 50 m on the left side (Private land),

3) km100+790: 85 m on the right side (used quarry).

The Contractor has concluded/received agreements with the owners of these land plots for the use and dispose of unsuitable material. In the future, these land plots will be suitable for commercial use.

2.3.4 Production Site Territory.

52. The production site of the Contractor China Railway No.5 is defined on the territory of the Kuyruchuk ayil okmotu not far from Tugol-Sai village at km 148+630.

53. Permits for the use of this territory were received from Kuyruchuk Aiyl Okmotu (for the camp - Order No. 52, Resolution No. 3, Act dated 20.12.21, a letter No. 02-4/155, conclusion No. 53, and a camp schematic layout. For asphalt plant and crushing and screening plant -Order No .14, a letter No. 01-1/434, conclusion No. 6).

54. The following buildings and structures are located on the production site: Asphalt plant, crushing and screening plant (Crusher), storage area for bulk materials - crushed stone and sand, concrete unit, hangar for storage of fuels and lubricants, transformer substation, checkpoint, a platform for garbage containers, outdoor toilets, a sump, a dormitory for the workers of the asphalt plant, and the crushing and screening plant.

55. The production site shall be fenced off in accordance with the Plan. In accordance with SSEMP requirements, these objects are located at a distance of at least 500 m from nearby houses, and in order to avoid potential contamination at least 50 m from water sources. The SSEMP requirements were met when locating the production site.

56. During the reporting period, the Contractor has made a bitumen pit on the territory of the production site and the relevant permits were obtained from the Issyk-Kul-Naryn Territorial Administration for ETS under MNRETS KR.

57. Currently, the Contractor installed a crushing and sorting plant (CSP) at km 106 - 300 of the project road, with an area of 1.57 hectares. The Contractor has obtained the necessary permits from the Cholpon Ata aiyl-okmotu of the Kochkor district and the Issyk-Kul-Naryn Regional

Office of the Ministry of Natural Resources, Ecology, and Technical Supervision of the Kyrgyz Republic.



Figure 7: Asphalt plant at the production site (km 148+630)



Figure 8: Camp site (km 148+630)



Figure 9 Crusher at the production site.



Figure 10: Bitumen pit. The bitumen pit is equipped with reinforced concrete liner and a floor to prevent the infiltration of petroleum products into the soil.



Figure 11: The production site (km 106+300)

2.3.5 Camp.

58. The Contractor's camp is located on km 148+630 in the municipal territory of the Kuyruchuk Ayil Okmotu. Permits to operate the territory as a camp were obtained from the Kuyruchuk Ayil Okmotu.

59. The territory of the Contractor's camp has been built up completely. The camp is located in the area of 2 hectares. The camp area includes: offices, a kitchen, canteen, Consultants' residential rooms, laboratory, a dormitory for the Contractor's workers, a Contractor's office, an equipment maintenance workshop, parking lot for cars and trucks a line maintenance hangar, security room, transformer, temporary garbage bins, decantation tank, and toilet and shower.

60. The present total number of employees living in the camp is 25 persons.

61. Potable water used in the camp is supplied in 18-L bottles from Balykchy city by the company "Shoro".

62. Sewage is collected in the fixed septic tanks. As the septic tank is filled, the sewage is removed by the Chaek Municipal Enterprise to the authorized waste landfill located in Chaek village for further treatment and disposal. Chaek Municipal Enterprise is the only specialized enterprise in the project area that has an authorized waste landfill. Solid waste is disposed to the landfill of Tugol-Sai village on the basis of the agreement. The landfill of Tugol-Sai village is in use, it was approved by the village government with signed Order № 13 b dated 18.04.22)

63. The contractor installed an additional construction camp and production area at km 106+300 of the project road, covering an area of 1.57 hectares. The contractor has obtained the necessary permits from the Cholpon aiyil-okmotu of Kochkor district and the Issyk-Kul-Naryn Territorial Administration for ETS under MNRETS KR (see Appendix).

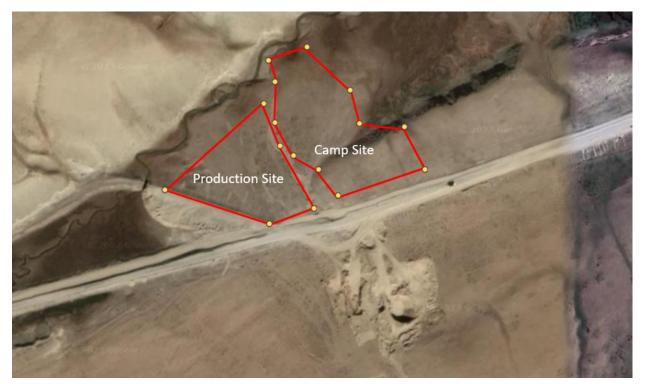


Figure 12: GIS location of the new construction camp and production area at km 106+300

64. The additional camp area already includes offices, a kitchen, a dining hall, accommodation for the Contractor's workers, the Contractor's office, a security room, a parking lot, a generator, a water reservoir, temporary waste bins, a septic tank, toilets, and showers.

65. The present total number of employees living in the camp is 55 persons.

66. Potable water used in the camp is supplied in 18-L bottles from Balykchy city by the company "Shoro".

67. Sewage is collected in the fixed septic tanks. As the septic tank is filled, the sewage is removed by the Chaek Municipal Enterprise to the authorized waste landfill located in Chaek village for further treatment and disposal. Chaek Municipal Enterprise is the only specialized enterprise in the project area that has an authorized waste landfill. Solid waste is disposed to the landfill of Tugol-Sai village on the basis of the agreement. The landfill of Tugol-Sai village is in use, it was approved by the village government with signed Order № 13 b dated 18.04.22).

68. This area is also planned to accommodate a warehouse and repair zone, and the production area will include an asphalt-concrete plant and a crushing and sorting plant.







Figure 13: The area of the additional construction camp (km 106+300)

2.4 Description of Any Changes to Project Design.

69. During the reporting period, a new detailed design of the Bridge at km 148+847.4 is being developed.

70. The contract design for Bridge No.1 was defined only by increasing the width of the existing bridge (with an additional structure). However, subsequent tests revealed that one beam on each side of the existing bridge (4 beams in total) had insufficient bearing ratio. However, the beams of the existing bridge are old type beams that have been removed from the standards, and therefore, the replacement of all the beams of the existing bridge with new ones has come to the fore. It is also on the agenda to include the same type of beams in the design of the additional structure designed to increase the width of the bridge.

- 71. At kilometer 122+432, it was deemed advisable to provide an additional culvert.
- 72. In response to a written request from the Kuyrukchuk aiyl okmotu, the replacement of 5 rectangular pipes of 0.5m*0.5m with rectangular pipes of 1.0m*1.0m (each with a length of L=5.05 m) was envisaged on the stretch from kilometer 143+100 to kilometer 143+623 on the left side (specifically, km 143+287 LHS, km 143+414 LHS, km 143+547 LHS, km 143+567 LHS, km 143+623 HLS).
- 73. At kilometer 127+720 on the right side, it was deemed advisable to provide entry and exit to the NUR store by installing additional cover slab plates in the channels.
- 74. The cancellation of the construction of the rectangular 0.5m x 0.5m pipe planned in the Tender Project at km153+168 RHS on the ramp.
- 75. Installation of additional longitudinal drainage rectangular pipes (0.5m x 0.5m) in Kuyruchuk village at the entrances to houses at km 143+373 LHS, km 143+400 RHS, and km 143+480 LHS.
- 76. Additional street lights in Jumgal Village. The tender lighting project from km129+295 to km129+470 on the left and right sides should be replaced by the section from km126+705 to km126+880 on the left and right sides.
- 77. At kilometer 158+348 158+368, it was deemed advisable to modify the drainage channels in the roadside part of the cemetery wall.
- 78. Construction options related to new detour roads and the addition of new culverts were applied as a practical tool to manage the construction process. Thus, for the construction of a rectangular culvert 2.0 m x 2.0 m at km 119+709.45 and for the removal of the old water pipe at km 119+720, a new detour road was provided to ensure road safety. The above had no effect on the overall design.
- 79. Installation of four additional sluices in Kuyruchuk village, namely one sluice for each section at km 140+970 RHS, km 141+340 RHS, km 141+460 RHS, and km 141+680 RHS.
- 80. Installation of additional lighting on the stretch from km 153+500 to 154+000 (L=500 m) with widening of the shoulder on the stretch from km 153+519 to 153+800 near the dimensional control point located at km 153+500 (LS).
- 81. In the reporting period, it was deemed advisable to provide rainwater drainage with 6-1-22-50 on the low-level edge of the asphalt in the horizontally curved sections of the road, and also, an agreement in principle was reached on the application of Polyethylene Signal Posts and the New Design Bus Stops.

2.5 Description of Any Changes to Agreed Construction Methods.

82. No changes were made in the agreed construction methods within the reporting period.

3 ENVIRONMENTAL SAFEGUARD ACTIVITIES.

3.1 General Description of Environmental Safeguard Activities.

Dust Suppression

83. During the reporting period, monthly monitoring of the project site was carried out by local environmental and HSE specialists of the Consultant. Inspections of the condition of the project road, quarry sites, spoil areas, sampling points for measurements, as well as the area of the production base and the contractor's camp were conducted.

84. There was increased dust formation occurred in dry weather during summer and early autumn in some parts of the road with heavy traffic (especially heavy-duty vehicles). Increased dust limits visibility on the roads as well as negatively affects the ambient air and public health. During the reporting period, the Contractor or Consultant did not receive any grievances about increased dust formation from the local population, since 8 water tankers were used to suppress dust along the project road in dry weather, from 4 to 6 water tankers were used in the autumn, and only 3 were used in December. The following measures are being taken at construction sites to reduce the negative impact of dust formation:

- All water trucks have been equipped with pumps. This measure supports rapid intake of water from the rivers and speeding up the turnover of watering process;
- In order to minimize dust generation at the project sites, the contractor was instructed to adjust the dust suppression schedule considering the air temperature;
- Speed must not exceed 30 km per hour on the roads with active construction.

Tree removal and compensatory tree planting

85. At the start of the construction works by China Railway No.5, tree marking was carried out with the participation of the Consultant and local government representatives. The importance of making maximum efforts to preserve existing green vegetation was communicated to the environmental protection specialist of the contracting company.

86. During the reported period, on the section km 123+650 – 127+080, 233 trees were removed. During the implementation of the project "Corridors CAREC 1 and 3 Connection Routes (Section 2B 'Highway Epkin [km 89] - Bashkuugandy [km 159])" from 2018 to the end of 2023, 1103 trees were cut along the project road. Prior to the start of the tree felling, the Contractor had received all necessary permits from the Naryn Territorial Administration for ETS under MNRETS KR.

87. As compensatory measures, the planting of new seedlings in a 1:2 ratio is planned. Five preferred tree species, characteristic of the local habitat, have been selected for planting: birch, Lombardy poplar, common poplar, blue spruce, and elm tree.

88. On November 12, 2023, the environmental working group visited two nurseries proposed by the Contractor:

- Nursery of deciduous trees "Kulanak" of the Naryn Forestry and

- Nursery of coniferous trees of the Naryn Forestry of the Naryn Forestry.

The nurseries in the same region as the road were chosen to ensure better adaptability of trees due to similar climatic and soil conditions. The environmental working group included:

- Nurlan Nurdinov, Ecologist, China Railway No.5 Engineering Group Co., Ltd.

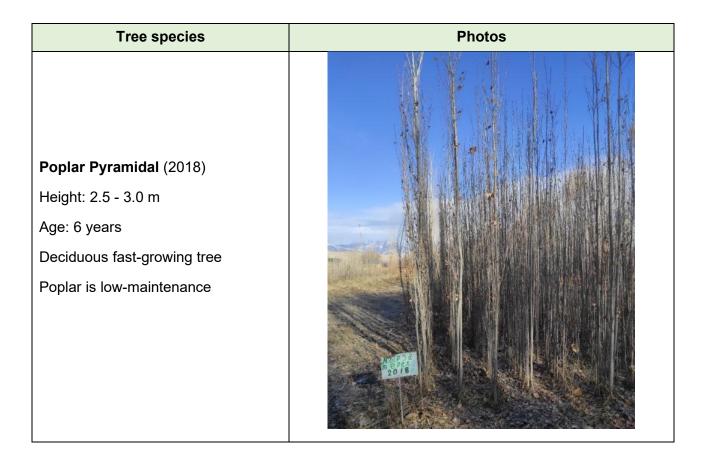
- Olga Syzonenko, International Environmental Consultant, Gentek International Engineering and Consulting Ltd.;

- Talant Zhumaliev, Local Environmental Protection Specialist, Gentek International Engineering and Consulting Ltd.;

- Azamat Sabirbekov, Chief Forester of the Naryn Forestry.

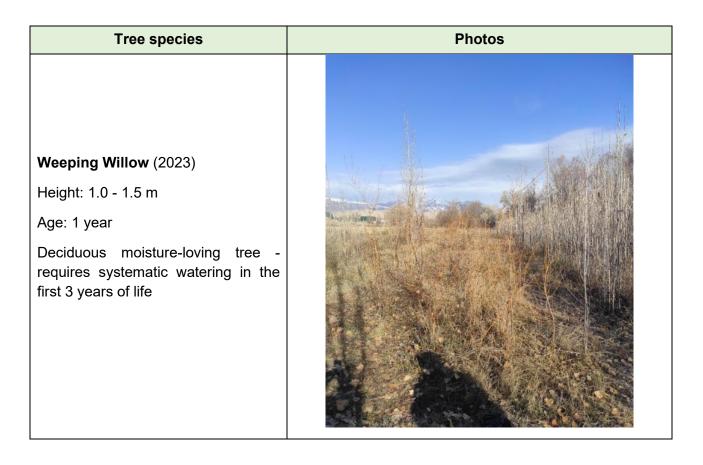
89. In the deciduous tree nursery of the "Kulanak" Forestry, the following tree species were represented (see Table below):

Table 11: Tree species in the deciduous tree nursery of the "Kulanak" Forestry





Tree species	Photos
Caragana (2020) Height: 1.0 - 1.2 m Age: 4 years Deciduous sun-loving tree Low-maintenance	<image/>
Willow (2023) Height: 1.0 - 1.5 m Age: 1 year Deciduous moisture-loving tree - requires systematic watering in the first 3 years of life	



90. Also, the nursery offers the following: Oleaster (2 meters), Rowan (2 meters), Birch (1.5 meters). However, like willows, these tree species are moisture-loving and require systematic watering in the first 3 years of life.

91. Based on the specifications for tree saplings, the following requirements were set: Height not less than 1.75 m, Age 4-5 years and Low maintenance.

92. Following the visit, the working group identified the following: Poplar Pyramidal 2018 (6-year-old sapling) and Poplar Pyramidal 2020 (4-year-old sapling).

93. In the nursery of coniferous trees of Naryn forestry, the following tree species were presented (see Table below):

Tree species	Photos
Larch (2019) Height: 1 m Age: 5 years Coniferous fast-growing tree, low maintenance	<image/>
Larch (2018) Height: 2 m Age: 6 years Coniferous fast-growing tree, low maintenance	

Table 12: Tree species in the nursery of coniferous trees of Naryn forestry

Tree species	Photos
Blue Spruce (2014) Height: 1 m Age: 10 years Coniferous slow-growing tree, low maintenance	
Tien Shan Spruce (2014) Height: 1 m Age: 10 years Coniferous slow-growing tree, low maintenance	

Tree species	Photos
Scots Pine (2018) Height: 1 m Age: 6 years Coniferous fast-growing tree, low maintenance	<image/>
Scots Pine (2016) Height: 2 m Age: 8 years Coniferous fast-growing tree, low maintenance	

94. Based on the specifications for tree saplings, the following requirements were set: a height of at least 1.75 m, age 4-5 years, and low maintenance. However, coniferous trees grow much slower than deciduous ones, making it challenging to meet the height requirement.

95. Following the visit, the working group recommends considering the following tree species for the spring compensatory planting (March-April 2024):

- Poplar Pyramidal (2018): 6-year-old sapling;
- Poplar Pyramidal (2020): 4-year-old sapling;
- Larch (2019): 5-year-old sapling;
- Scots Pine (2018): 6-year-old sapling;
- Blue Spruce (2014): 10-year-old sapling;
- Tien Shan Spruce (2014): 10-year-old sapling.

96. To select areas/places for compensatory planting, on November 16, 2023, the environmental working group visited the villages of Jumga, Jany-Aryk, Kuyruchuk, and Tugol-Sai:

The environmental working group included:

- Nurlan Nurdinov, Ecologist, China Railway No.5 Engineering Group Co., Ltd.

- Olga Syzonenko, International Environmental Consultant, Gentek International Engineering and Consulting Ltd.;

- Representatives of the local administration.

97. To compensate for roadside trees that were cut down during the reconstruction of the Epkin - Dyikan (Bashkugandy), the planting of trees was envisaged, with a total of 2,206 trees, specifically 200 coniferous trees and 2,006 deciduous trees in the following areas:

1. Jumgal village of Jumgal aiyl okmoty: 50 coniferous trees and 500 deciduous trees (pyramidal poplar) should be planted in the area of 1.46 ha with marking codes as 4-03-04-1001-0249, 4-03-04-1001-0250, 4-03-04-1001-0251, Road A. Jetigenov, west of Jumgal village.

2. Jany-Aryk village of Kyzart aiyl okmoty: 50 coniferous trees and 300 deciduous trees should be planted in the following areas:

1) Jany-Aryk village: House of Culture named after M. Akimkojoev, land of 1.46 ha in the eastern part of the village (1206 meters away from km133+000 LHS).

2) Jany-Aryk village: in the yard of the secondary school named after R. Soltonoev, 0.15 ha (1760 meters away from km135+880 LHS)

3. Kuiruchuk village of Kyzart aiyl okmoty: 50 coniferous trees and 576 deciduous trees should be planted in the following areas:

1) The yard of the House of Culture, 0.37 ha (10 meters away from km142+900 LHS);

- 2) Land of 0.32 ha in the east of the village(160 meters away from km141+130 LHS);
- 3) Land of 0.34 ha near the new hockey stadium (320 meters away from km141+460 LHS)

4) On the section of Epkin-Dyikan [Bashkugandy] highway, 0.15 ha (10 meters away from km148+200 LHS).

4. Tugol-Sai village of Tugol-Sai aiyl okmoty: 50 coniferous trees and 500 deciduous trees should be planted in the following areas:

1) The yard of the House of Culture, 0.35 ha (650 meters away from km 149+600 RHS);

2) Land plot 0.44 ha near the Epkin-Dyikan [Bashkugandy] highway (20 meters away from km 152+200 LHS);

3) Land plot 0.14 ha near the Epkin-Dyikan [Bashkugandy] highway (60 meters away from km 152+500 LHS).

5. And the remaining 130 trees (pyramidal poplar) are recommended to be planted along the road passing through the above-mentioned villages.

98. The permits on planting trees from related village governments and the tree planting plans are presented in the Annex 3.

99. Tree planting will be conducted in spring 2024 (March – April).

Archaeological Objects of Historical and Cultural heritage.

100.During the design stage, in accordance with the legislation of the Republic of Kyrgyzstan, the project "CAREC Corridors 1 and 3 Connector Road, Section 2B Epkin-Dyikan [Bashkugandy], Km: 89+500 – 159+200" has passed through the environmental and government expertise (Gosstroyekspertiza). In total, 38 objects have been described as the cultural and historical heritage sites (CHHS). Out of hem: 18 mounds were recommended for surveys prior to the process of road construction and 20 mounds during the construction.

101.Since then, several archaeological excavations have been carried out along the project route. The most recent extensive archaeological survey was conducted in the second quarter of 2022 and included dating and interpreting objects and sites of historical interest.

102. The detailed report describing all the findings revealed on OHCH during this survey is presented in the relevant sections of the Semi-annual Environmental Monitoring Report, January-June 2022 "CAREC Corridors 1 and 3 Connector Road, Section 2B Epkin-Dyikan [Bashkugandy], Km: 89+500 – 159+200 project" and available for readers via the ADB internet site.

103.At present, the set tasks regarding archaeological excavations and documentation of the "scheduled for demolition" sites have been fully completed. A total of 70 burial mounds (with 93 burials) were excavated at 10 burial sites in the Kochkor and Jumgal Valleys, as well as at the Kyzart Pass, thus, the archaeological excavations have been completed in full at the project site and a report has been prepared.

104.In order to prevent any potential direct or indirect impact on historical and cultural heritage sites located along the construction areas of the project road, after the completion of excavation works, information boards were installed at 16 archaeological sites. These boards are in three languages (Kyrgyz, Russian, and English) and provide information about the type, name, chronological attribution, and protected zones of the monuments. This fully complies with the requirements of the national legislation, specifically the Law of the Kyrgyz Republic "On the

Protection and Use of Historical and Cultural Heritage" dated July 26, 1999, No. 91 (as amended on March 18, 2017, No. 47).



Figure 14: CHHS information board

a. Site Audits.

105.On-site inspections/audits carried out by the Consultant Local Environmental Specialist and Contractor Environmental Engineer at the project site during the reporting period are shown in Table 14.

Table 13: Inspections/Audits of the project area.

Nº	Date of Visit	Auditor name	Purpose of Inspection/Audit	Summary of any Significant Finding
1	27.07.2023	Zhumaliev T. Nurdinov N.	Visual inspection to ensure compliance with environmental requirements at construction sites, quarries, dumps, campgrounds, and production areas. The visit was conducted jointly with the	 To organize and equip fire extinguishing shields in the camp and the production site; To prepare an agreement with the aiyl okmotu for the removal of construction and household waste from a new temporary camp and production site;

INTERNAL. This information is accessible to ADB Management and staff. It may be shared outside ADB with appropriate permission.

Nº	Date of Visit	Auditor name	Purpose of Inspection/Audit	Summary of any Significant Finding
			Contractor's environmental specialist.	3. To keep the territory clean and remove the trash on time.
				4. To store barrels with bitumen away from the water protection zone and concrete the foundation platform.
				The contractor has been sent an official letter highlighting the non-conformities.
2	26.09.2023	Zhumaliev T. Nurdinov N.	Visual inspection to ensure compliance with environmental requirements at construction sites, quarries, dumps, campgrounds, and production areas. The visit was conducted jointly with the Contractor's environmental specialist.	 To organize and equip fire extinguishing shields in the camp and the production site; To prepare an agreement with the aiyl okmotu for the removal of construction and household waste from a new temporary camp and production site; To keep the territory clean and remove the trash on time. Not to allow oil to spill into the ground. To cover the gas cylinders. To organize a laundry cabin upon request
				7. To organize boxes for household waste in the new campThe contractor has been sent an official letter highlighting the non-conformities.
3	09 – 10.10.2023	Zhumaliev T. Nurdinov N.	Visual inspection to ensure compliance with environmental requirements at construction sites, quarries, dumps, campgrounds, and production areas. The visit was conducted jointly with the Contractor's environmental specialist.	 To keep clean conditions, remove waste promptly and do not burn it; Not to allow oil to spill into the ground. To fix, or put a new washbasin in the lavatory. To organize signs pointing 'gents WC' and 'ladies WC' for lavatories. To organize boxes for household and other waste in the new camp. To provide workers with PPE To carry out instrumental monitoring at the project site The contractor has been sent an official letter highlighting the non-conformities.
4	07.11.2023	Zhumaliev T. Nurdinov N.	Visual inspection to ensure compliance with environmental	1. According to clauses 5.1 and 6.1 of the SSEMP, it is necessary to prepare and

Nº	Date of Visit	Auditor name	Purpose of Inspection/Audit	Summary of any Significant Finding		
		Syzonenko O.	requirements at construction sites, quarries, dumps, campgrounds, and production areas. The visit was conducted jointly with the Contractor's environmental specialist.	submit a Safety and Environmental Protection Training Plan for 2024.		
		campgrounds, and production areas. The visit was conducted jointly with the		2. Due to systemic violations in the waste management and oil product spills, it is necessary to conduct training on the following SSEMP plans:		
				- elimination of oil spills from the soil surface, in accordance with Appendix (viii) "Soil Management Plan";		
				- waste management in accordance with Appendix (ix) "Solid and Liquid Waste Disposal Plan";		
				- maintaining cleanliness on the territory of camps, Appendix (xii) "Construction Site and Camps Management Plan".		
						3. According to clause 3.1.2. of the Health and Safety Management Plan (HSMP) and clause 7.4, the SSEMP, it is necessary to hold a lecture on HIV/AIDS for the Contractor's personnel with the involvement of healthcare practitioners of the regional hospital and to ensure the availability of information materials on HIV and STI prevention in booklets, brochures, posters in Kyrgyz, Chinese and Russian at the construction camps (km 106+300 and km 148+630);
				4. According to Appendix (IX) of SSEMP and the Law of the Kyrgyz Republic "On Production and Consumption Waste" (No. 53 dated October 13, 2001), it is necessary to create/keep a log to record the collection and disposal of waste, to ensure the availability of sealed containers for the collection of hazardous waste (waste containing substances that have, at least, one of the dangerous properties (toxicity, explosion hazard, and fire hazard)), such as oily rags and soil/sand contaminated with oil products;		
				5. According to clause 4 of Appendix (XIV) "Emergency Management Plan" of SSEMP, it is necessary to ensure the availability of information materials (posters) with contact details of all emergency services in Kyrgyz, Chinese and Russian languages at the construction camps (km 106+300 and km 148+630);		

Nº	Date of Visit	Auditor name	Purpose of Inspection/Audit	Summary of any Significant Finding
				The contractor has been sent an official letter highlighting the non-conformities.
5	12.11.2023	Zhumaliev T. Nurdinov N. Syzonenko O. Sabirbekov A.	Visit to Nursery of deciduous trees "Kulanak" of the Naryn Forestry and Nursery of coniferous trees of the Naryn Forestry of the Naryn Forestry	Ensure that the cost of suitable tree species does not exceed the allocated budget for compensatory planting.
6	16.11.2023	Zhumaliev T. Nurdinov N. Syzonenko O. Representativ es of the aiyl okmotu.	Visit the potential sites for compensatory tree planting.	Provide approvals for tree planting locations, quantities, and species with local authorities (aiyl okmotu).

106.Findings observed during the Consultant's audit were communicated to the contractor for corrective actions. Total 26 non-compliances were raised from them 19 were corrected (closed), 7 actions are remained open/ongoing and their developments should be monitored during the future inspections/audits. Status of non-compliances and corrective actions is also shown in figure 16.

107.Tables 15 summarizes the findings observed during the formal audit conducted by Consultant and Contractor's environmental specialists and status per end of December, 2023.

ADB Mission.

108. The representatives of ADB conducted the visit to CAREC Corridors 1 and 3 Connection Road Section 2B, Epkin – Bashkuugandy" in October 2023 to review environmental safeguards compliance site-specific environmental management plan (SSEMP) implementation and contract provisions on environment, health and safety. After the project site visit the Mission has prepared the following recommendations for the PIU for ensuring continued compliance with environmental safeguards:

- regularly check contractors' logbooks/records of SSEMP implementation;
- provide a link to disclosed SAEMR on PIU website;
- request CSC to review contractors Emergency Response Plan to enhance protocols for avoiding occupational health and safety risks;
- require the CSC to continue undertaking frequent site monitoring and support the contractor to implement corrective actions if the mitigation measures are not sufficient/effective.
- notify the civil works contractor to:
- Revise the SSEMP to include the second workers camp and crusher plant;
- Improve housekeeping practices and address poor sanitary and hygiene conditions at the workers camp;
- Continue engagement with local communities, sharing project-related information with those affected along the road alignment. Conduct focused meetings and information dissemination on road safety, ensuring this status is reflected in the

SAEMRs;

- Maintain logbooks and records as per the SSEMP and as directed by the PIU and/or CSC; and
- Ensure that the contractor's environment and health and safety officers are consistently on- site, conducting daily toolbox talks for workers, especially those operating heavy equipment and working in nearby villages, with this status documented in the SAEMRs.







Figure 15: ADB review mission at the project site, October 2023

3.2 Issues Tracking (Based on Non-Compliance Notices).

109. 26 findings were observed, out of them 19 were closed, 7 remained open/ongoing; summary overview is shown in the table below.

Table 14: Overview on findings observed during July- December, 2023

Nº	Non-compliance identified	SSEMP Number and date of notification	Best Practice Guidelines Applicable	Particular issue and location	Contractor's actions (specify)	Results of Inspection	Status for December 2023
1	Waste management	Annex (ix) – Solid and liquid Waste Management Plan Gentek Ref.: June 27, 2023/347 Gentek Ref.: July 31, 2023/385 Gentek Ref.: September 28, 2023/467 Gentek Ref.: October 18, 2023/492 Gentek Ref.: November 22, 2023/526	Waste separation. The availability of sealed containers for collecting hazardous waste, such as oiled rags and soil/sand contaminated with oil products. Keep records of waste collection and disposal.	The territory of the camp and the production base is not kept clean. To create the log for registration of the collection and disposal of waste To prepare an agreement with the aiyl okmotu for the removal of construction and household waste from a new temporary camp and production site. To store barrels with bitumen away from the water protection zone and concrete the foundation platform. To organize boxes for household waste in the new camp. Due to systemic violations in the waste	The Contractor has hired a full-time cleaner for regular cleaning and waste disposal. Regarding the issue of household waste in the camp, the Contractor has built waste pools for unified stacking of waste and cleans them up regularly. Regarding the issue of bitumen storage raised by the Engineer, the Contractor has rectified it and placed concrete and much sand and gravel materials on the bitumen storage area. The drainage problem in the laundry room of the Contractor's second camp has been rectified, and the sewage is no longer flowing out.	Contractor's Ref.# CR5-ED-352. Dated: 08.07.2023 Contractor's Ref.# CR5-ED-381. Dated: 14.08.2023 Contractor's Ref.# CR5-ED-487. Dated: 19.10.2023	The violation has been partially rectified. These issues will be monitored during future audits. The absence of training and a journal for tracking the collection and disposal of waste.

Nº	Non-compliance identified	SSEMP Number and date of notification	Best Practice Guidelines Applicable	Particular issue and location	Contractor's actions (specify)	Results of Inspection	Status for December 2023
				management, it is necessary to conduct training on the following SSEMP plans: - waste management in accordance with Appendix (ix) "Solid and Liquid Waste Disposal Plan"; - maintaining cleanliness on the territory of camps, Appendix (xii) "Construction Site and Camps Management Plan".			
2	Maintenance of vehicles to minimize emissions and spill	SSEMP, 6.4 EMP Gentek Ref.: September 28, 2023/467 Gentek Ref.: October 18, 2023/492 Gentek Ref.: November 22, 2023/526	established a daily equipment maintenance and guarantee system	Regularly conduct technical maintenance of vehicles to minimize emissions to the atmosphere and spills on the ground. Due to systemic violations in the oil product spills, it is necessary to conduct training on the elimination of oil spills from the soil surface, in accordance with Appendix (viii) "Soil Management Plan".	the Contractor has established a system of daily equipment maintenance and guarantee. The Contractor will continue to strengthen the maintenance of project equipment. The Contractor has rectified the oil spilling issue raised by the Engineer.	Contractor's Ref.# CR5-ED-487. Dated: 19.10.2023	The violation has been partially rectified. These issues will be monitored during future audits. The absence of training.

Nº	Non-compliance identified	SSEMP Number and date of notification	Best Practice Guidelines Applicable	Particular issue and location	Contractor's actions (specify)	Results of Inspection	Status for December 2023
3	PPE	Annex (xii) – Camp and Workshop Management Plan Gentek Ref.: June 27, 2023/347 Gentek Ref.: October 18, 2023/492	Safety equipment and personal protective equipment are required to be available on the Site at all material times and measures for the effective enforcement of proper utilization and necessary replacement of such equipment and clothing, and all construction plant and equipment used on or around the Site shall be fitted with appropriate safety devices.	To provide all working personnel with a full PPE; monitor that PPE in good condition and personnel wear it	the Contractor's safety engineer will strengthen supervision activities to improve performance and prevent improper wearing or working without PPE. Contractor has stored enough PPE for workers to receive and replace. The Contractor has been supervising workers to wear PPE at any time during on-site construction.	Contractor's Ref.# CR5-ED-352. Dated: 08.07.2023. Contractor's Ref.# CR5-ED-295. Dated: 08.05.2023	Resolved for this action. These issues will be monitored during future audits
4	Camp	Annex (xii) – Camp and Workshop Management Plan Gentek Ref.: September 28, 2023/467 Gentek Ref.: October 18, 2023/492	Living and office spaces in construction camps should provide all the necessary conditions for the full-fledged work, rest, and accommodation of the personnel.	To organize a laundry cabin upon request. To fix, or put a new washbasin in the lavatory. To organize signs pointing 'gents WC' and 'ladies WC' for lavatories.	The drainage problem in the laundry room of the Contractor's second camp has been rectified, and the sewage is no longer flowing out	Contractor's Ref.# CR5-ED-487. Dated: 19.10.2023	The violation has been partially rectified. These issues will be monitored during future audits
5	Safety instructions	SSEMP, 5.1 Annex (xii) – Camp and Workshop Management Plan	To prepare a training plan for safety and adhere to it. Safety Meetings. Regular safety meetings should be conducted on a regular basis and	To conduct safety instruction for the working personnel on a regular basis. To prepare and submit a Safety and Environmental Protection Training Plan for 2024.	The Contractor conducts monthly briefings for the workforce, including initial occupational safety briefings.	Contractor's Ref.# CR5-ED-323. Dated: 05.06.2023	The violation has been partially rectified. These issues will be monitored during future audits.

Nº	Non-compliance identified	SSEMP Number and date of notification	Best Practice Guidelines Applicable	Particular issue and location	Contractor's actions (specify)	Results of Inspection	Status for December 2023
		Gentek Ref.: November 22, 2023/526	require attendance by the safety representatives of Subcontractors unless otherwise agreed by the Engineer. In addition, toolbox talks may be envisaged to heighten worker's awareness of specific workplace hazards. Safety Inspections. The Contractor shall regularly inspect, test and maintain all safety equipment, guardrails, working platforms, hoists and other means of access, lifting, lighting, signing and guarding equipment. Lights and signs shall be kept clear of obstructions and legible to read. Equipment, which is damaged, dirty, incorrectly positioned or not in working order, shall be repaired or replaced immediately.	To ensure the availability of information materials (posters) with contact details of all emergency services in Kyrgyz, Chinese and Russian languages at the construction camps (km 106+300 and km 148+630).	The Contractor's HSE Engineer conducted a safety briefing for all workers, including workers from Pakistan, and will continue to provide regular training to enhance workers' awareness of safety practices.		The absence of Safety and Environmental Protection Training Plan for 2024 and the absence of information materials (posters) with contact details of all emergency services.
6	Fire safety	SSEMP, 6.4 EMP Annex (xii) - Construction Site	Compliance with all requirements of fire safety in accordance with the Law of the	To organize and equip fire protection shields.	Fire shields are organized and equipped.	Contractor's Ref.# CR5-ED-352. Dated: 08.07.2023 Contractor's Ref.#	Resolved for this action. These issues will be monitored

Nº	Non-compliance identified	SSEMP Number and date of notification	Best Practice Guidelines Applicable	Particular issue and location	Contractor's actions (specify)	Results of Inspection	Status for December 2023
		and Camp Management Plan Annex (xiii) - Materials Processing, Equipment Yard, and Storage Plan Gentek Ref.: June 27, 2023/347 Gentek Ref.: July 31, 2023/385 Gentek Ref.: September 28, 2023/467	Kyrgyz Republic dated June 7, 2016, No. 78 "On Ensuring Fire Safety." Provide primary fire- fighting equipment at the site, in particular, fire extinguishers and firefighting accessories boards with required equipment. Regularly train workers on the use of firefighting equipment.	To install a shield on the welding site from the refueling storage side. To cover the gas cylinders.		CR5-ED-381. Dated: 14.08.2023 Contractor's Ref.# CR5-ED-487. Dated: 19.10.2023	during future audits
7	Health and safety	clause 3.1.2. of the Health and Safety Management Plan (HSMP), SSEMP, 7.4 EMP Gentek Ref.: November 22, 2023/526	Measures and actions for information dissemination include: - Conducting lectures for contractor personnel with the involvement of medical workers from the local hospital. - Providing informational materials on HIV and STI prevention to builders in the form of booklets, brochures, and posters in both Kyrgyz, Chinese and Russian languages.	To hold a lecture on HIV/AIDS for the Contractor's personnel with the involvement of healthcare practitioners of the regional hospital and to ensure the availability of information materials on HIV and STI prevention in booklets, brochures, posters in Kyrgyz, Chinese and Russian at the construction camps (km 106+300 and km 148+630);	No response	No response	The violation has not been rectified. These issues will be monitored during future audits

Nº	Non-compliance identified	SSEMP Number and date of notification	Best Practice Guidelines Applicable	Particular issue and location	Contractor's actions (specify)	Results of Inspection	Status for December 2023
			- Incorporating information on HIV/STI prevention measures into the employment contract.				
			- Prohibiting and penalizing drug and alcohol abuse.				
			- Considering the possibility of providing condoms to all Contractor employees throughout the duration of the contract.				
			- Displaying posters with information about the spread of HIV/AIDS in construction camps in both Kyrgyz and Russian languages.				
8	Timely conduct of environmental monitoring.	SSEMP, 6.2 – environmental monitoring; SSEMP, 6.5 – Environmental Monitoring Plan	A program of monitoring needs to be timely conducted to ensure that Contructor takes the specified action to provide the required mitigation, to assess whether the action has	Provide the results of instrumental monitoring conducted by the air and water quality laboratory, as well as measurements of noise and vibration. Include the temporary base and residential	The contractor has provided a report on the results of instrumental monitoring of air and water quality, as well as measurements of noise and vibration. Another sampling point	Contractor's Ref.# CR5-ED-352. Dated: 08.07.2023 Contractor's Ref.# CR5-ED-558. Dated: 15.12.2023	Resolved for this action.
		Gentek Ref.: June 27, 2023/347	adequately protected the environment, and to determine whether any	camp area (km 106+300) in the instrumental monitoring of water and	for water and air, specifically the camp (km 106+300), has been		

Nº	Non-compliance identified	SSEMP Number and date of notification	Best Practice Guidelines Applicable	Particular issue and location	Contractor's actions (specify)	Results of Inspection	Status for December 2023
		Gentek Ref.: August 15, 2023/402 Gentek Ref.: October 18, 2023/492	additional measures may be necessary.	air quality starting from August 2023.	added to the instrumental monitoring.		
9	Compensatory tree planting	SSEMP, 3.1 – Environmentally vulnerable areas Gentek Ref.: November 02, 2023 r /511 Gentek Ref.: November 24 2023 r /532	Implement compensatory measures to restore the number of green plantations by planting new tree saplings as construction work on the project site is completed. Plan for the planting of new tree samplings at a ratio of 1:2, meaning that for every tree cut down, the planting of 2 new trees is planned, of the same species or a different species in suitable locations.	To provide: - a list of proposed nurseries with an indication of the type of trees. - sites /planting sites (indicating KM or PK). - written approvals of the planting locations, quantities, and tree species from local authorities.	The contractor provided a list of nurseries, tree planting locations, and obtained approvals from local authorities.	Contractor's Ref.# CR5-ED-561. Dated:20.12.2023	Resolved for this action.

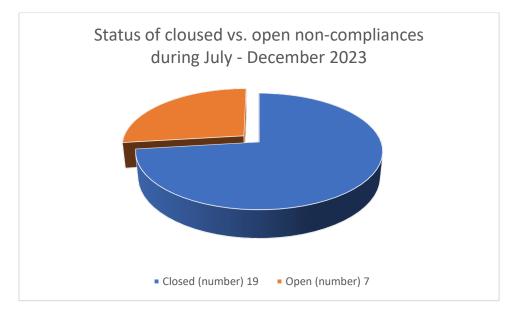


Figure 16 Status of Non-compliances and Corrective Actions.

Overview and Description of the Problems Observed during the Current Period.

110. During the reporting period, the focus was on the following issues:

- The road construction work has been carried including earthwork, construction of structures and pavements; production of asphalt concrete mix, concrete and crushed aggregate fractions, cut excavation, embankment, completion of installation of previously started culverts, as well as laying of new culverts and other relevant activities.
- Key personnel list has been updated and submitted by the Contractor.
- Monthly inspections of environmental safeguard have been conducted along the project area. Findings, non-compliant with the criteria established for the construction project were communicated to Contractor for corrective actions. During the reporting period, the Contractor has followed the requirements of the contract and technical specifications on environmental performance. Most findings were closed and evidences provided. However, as it was described above in the report a fact of recurrences of a range of noncompliances were frequently observed. It is suggested to undertake a risk-based approach to prevent this gap in the future and continually improve performance.
- Insufficient fire safety, waste utilization activities, and housekeeping; oil leaks on the soil in the Camp/production site area, missing of PPEs or parts of it, conducting trainings are the measures an improvement for which is strongly suggested.

Summary of Observed Issues

111.Monthly inspection of the project site was conducted, based on the results of the inspection, notifications have been addressed for correction of non-compliances. Recommendations on mitigation measures were proposed to eliminate or reduce risks.

 Table 15: Summary of Issues Tracking Activity for Current Period

Total Number of Issues for Project	26		
Issues Opened This Reporting Period	7		
Issues Closed This Reporting Period	19		
Percentage Closed Issues	73 %		

3.3 Trends.

112.An analysis of trends in non-conformities identified during previous and current inspections indicates a poor effectiveness of the environmental protection and safety process in relation to the violations. Repetitions of some violations are constantly recorded. In particular, non-conformities in fire safety, compliance with sanitary and epidemiological requirements, and the wearing of a full set of PPE by personnel. As seen from the table 17 the same findings are observed during following audits conducted by the Consultant's environmental specialist. These recurrences are particularly related to fire safety, trainings, tidiness and timely utilization of waste, wearing of full PPE by personnel and some other. The contractor shall understand and be consistent in meeting the environmental safeguard requirements. Preventive controls are to be applied to eliminate these non-compliances before they are occurred. Thus, it is strongly suggested to increase focus on environmental compliance performance.

Table 16: Trends on issues observed, 3-4 Q 2023

Quarterly Report No	Total No of Issues	% issues closed	% unclosed issues	
3	11	82	2	
4	15	67	5	
ADB & PIU review mission	0	0	0	

Comment: Re-occurred individual findings are taken into account in the table.

113. There was recurrence of non-compliances observed during the reporting period. The recurrences were related to waste management, housekeeping and fire safety. These compliance actions shall be monitored throughout the further inspections/audits, and with the start of the 2024 construction season, the CSC will prepare a Corrective Action Plan with set dates for rectification.

3.4 Unanticipated Environmental Impacts or Risks.

114. The risks were identified and covered in the SSEMP document. When assessing the additional work described in section 2.4 for environmental impact, no significant risks or impacts on the environment were identified.

3.5 Summary of Appeals and Grievances

115.A Grievance Redress Group (GRG) within the frameworks of the Grievance Redress Mechanism (GRM) at the project site is established before the commencement of construction work. The GRG includes representatives of local government bodies, contractor, consultant, PIU, etc.

116.No appeals or grievances regarding environmental protection issues were registered during the reporting period.

4 RESULTS OF ENVIRONMENTAL MONITORING.

4.1 Overview of Monitoring Conducted during Current Period.

117.Environmental monitoring of noise, vibration, surface water quality, and air quality were conducted in August and November 2023.

118.Instrumental measurements of noise and vibration were carried out by commercial laboratory ProfiLab LLC; air quality and surface water quality were evaluated by the laboratory of chemical-analytical research under the Ministry of Health of the Kyrgyz Republic. Dates of sampling and analyses are shown in table 17.

N⁰	Monitoring name	Date of monitoring	Date analyses conducted
1	Noise and Vibration	14.08.2023	16.08.2023
1		10.11.2023	14.11.2023
2	Surface Water Quality	16.08.2023	17.08.2023 – 28.08.2023
2	Surface Water Quality	23.11.2023	24.11.2023 – 04.12.2023
3	Air Quality	16.08.2023	17.08.2023 – 18.08.2023
3	Air Quality	23.11.2023	24.11.2023

Table 17: Instrumental Monitoring Dates

119.Outcomes of instrumental monitoring measurements implemented during the reporting period are presented in sections 4.1.1. to 4.6 below in the report; original laboratory reports are attached in Annex 4.

4.1.1 Noise and Vibration Impact Monitoring.

120.The noise and vibration instrumental tests were implemented by the specialists of the ProfiLab LLC laboratory. Noise and vibration levels were measured at 4 points along the planned project road in the vicinity of settlements:

Point 1. Tugol-Sai v., west side of the Kutman store, km 151+000;

Point 2. Tugol-Sai v., the north-eastern side of the Asphalt plant and Crusher, km 149+000;

Point 3. Kuyruchuk v., near the Azamat store, km 144+000;

Point 4. Jumgal v., near the school, km 129+400.

121.Noise and vibration measurements were carried out with the Ecophysics 110A digital vibrometer calibrated in accordance with the standard. Three measurements were taken at each point with an interval of approximately 2 hours between measurements.

122.Noise measurements were carried out in accordance with GOST 23337-2014 "Noise. Methods for measuring noise in the residential area and in the premises of residential and public buildings." GOST 20444-2014 "Traffic flows. Methods for determining the noise characteristic."

123.Vibration measurements were carried out in accordance with GOST 31319 "Vibration. Measurement and evaluation of human exposure to whole-body vibration."

124. The outcomes of instrumental noise measurements showed that at the time of the measurements, the noise levels at points near the road in August varied from 49 dBa to 66 dBa and in November - from 48 dBa to 58 dBa.

125. The outcomes of instrumental measurements of vibration from traffic flow on road showed levels between 84 dB to 98 dB in August and 79 dB to 94 dB in November. The detailed results of noise and vibration impact monitoring are given in Annex 4.





69



Figure 17: Instrumental Monitoring on Project Road

4.1.2 Surface Water Quality Monitoring.

126. Sampling and test of surface water quality was carried out by specialists from the laboratory of chemical-analytical studies of the Department of Disease Prevention and the State Sanitary and Epidemiological Surveillance under the Ministry of Health of the Kyrgyz Republic. Measurements of water transparency, biochemical oxygen demand (BOD₅), the content of oil products and suspended solids were carried out during the reporting period.

127. The samples were taken at 3 points:

Point 1. Water from the Charlai river, near DSU, km 106+300;

Point 2. Water from the irrigation canal at km141+874 Kuyruchuk village

Point 3. Water from the daily pondage basin at km 140+600 Kuyruchuk village

128. Laboratory tests were carried out in accordance with the "Rules for the Protection of Surface Waters of the Kyrgyz Republic" of the Government of the Kyrgyz Republic dated March 14, 2016, No. 128 and the hygienic standards "Maximum allowable concentration limits (MAC) for chemicals in the water of water bodies for household-drinking and utility needs of public", dated April 11, 2016, No. 201.

129. Based on the chemical analysis conducted in August and November, the water samples did not exceed the MAC (Maximum Allowable Concentrations) for the domestic and cultural category.

130. All parameters were within the established norms. The outcomes of surface water monitoring are given in Annex 4.

4.1.3 Air Quality Monitoring.

131. Sampling and tests of air quality was carried out by specialists from the Laboratory of Chemical Analytical Research of the Department of Disease Prevention of the State Sanitary and Epidemiological Surveillance under the Ministry of Health of the Kyrgyz Republic. Measurements of dust, nitrogen dioxide, sulfur oxide, and carbon monoxide were performed during the reporting period.

132. The samples were taken at 5 points:

Point 1. DSU, second camp, km 106+300;

Point 2. Tugol-Sai village, on the west side of the Kutman store, km 151+000;

Point 3. Tugol-Sai village, north-eastern side of the Asphalt plant and Crusher, km 149+000;

Point 4. Kuyruchuk village, near the Azamat store, km 144+000;

Point 5. Jumgal village, near the school, km 129+400.

133.Laboratory tests were carried out in accordance with the guidelines for the control of atmospheric pollution. The concentrations of the investigated pollutants in the ambient air did not exceed the maximum permissible concentrations (MPCs) at any stage of monitoring. The monitoring outcomes are presented in Annex 4.

4.2 Trends.

134. The rounds of instrumental tests (monitoring of noise, vibration, atmospheric air and water) have been carried out during the reporting period (in August 2023 and November 2023).

135. Equivalent noise levels near the road in the daytime amounted to 48 - 66 dBA, which was in line with sanitary standards.

136. Vibration levels were below the maximum permissible levels and ranged from 79 dB to 98 dB.

137. There were not negative trends observed in the measured parameters of surface water.

138. Air quality parameters were within MAC levels for all pollutants.

4.3 Summary of Monitoring Outcomes.

139. The sampling and analyses of noise, vibration, surface water quality, and ambient air quality were carried out in the assigned locations in August and November. The reports with detailed results of monitoring studies are presented in Annex 4.

140.<u>Noise and Vibration Impact Monitoring</u>: Instrumental noise measurements showed that during monitoring, the noise levels at points near the road in August were diapason from 49 dBA to 66 dBA, and in November from 48 dBA to 58 dBA (i.e., below the daily allowable level set at 70 dBA). The overall vibration level from traffic on the project roads was below the acceptable level (108 dB) and ranged from 84 dB to 98 dB in August and from 79 dB to 94 dB in November.

141.<u>Surface Water Quality Monitoring</u>: All parameters measured in surface water samples taken at assigned points wire laying within the MAC levels.

142.<u>Air Quality Monitoring</u>: The Concentrations of pollutants in the atmospheric air were within the MAC at all monitoring stages.

4.4 Material Resources Utilisation.

143.China Railway No.5 performs water consumption for dust suppression using previously agreed and approved water sources (from the Jumgal, Tugol-Sai, Karasuu and Kyzartsuu rivers). The use of electricity, water and other materials were not reported for monitoring in SSEMP.

4.5 Waste Management.

144.The Contractor developed the Waste Management Plan in the SSEMP describing the project's waste management activities.

145.Solid household waste generated on the territory of the contractor's and subcontractors' camps is collected in the waste bins located in the designated fenced area and disposed using local disposal resources in accordance with the contract signed between contractor and Tugol-Saysky Aiyl Okmotu (Order No. 13b).

146.Wastewater is collected in the septic tanks and moved to Naryn for proper treatment and utilization.

147.Observations of not timely utilization of domestic waste from the territory of Camp were made on several occasions. There were cases of accumulation of construction waste in the production base.

148.Reinforced concrete construction waste is generated during the dismantling of bridges and culverts. The contractor shall pay attention so that this type of waste as well as old asphalt are not accumulated in the areas which have not been designated for this purpose.

4.6 Health and Safety.

4.6.1 Community Health and Safety.

149.The Contractor has appointed a full-time HSE and Traffic Safety Specialist, Abilabekov Kozhomkul. There is no permanent medical staff involved in the project; in case of emergency or if any medical treatment is required the local medical facility in vicinity of the camp has been contracted for provision with healthcare services.

150. There were no cases of road traffic or other accidents reported that led to serious consequences for the health of the local population during the reporting period.

151.Consultant's Road Safety Engineer, Bolotbek Toktomushev undertook monthly visits of the project road and construction sites to insure safety measures are followed. Urgent non-conformities were closed immediately, non-conformities requiring longer time to fulfill were communicated to Contractor in a formal way.

152.Road maintenance activities are fulfilled by the Contractor during the year. The Contractor has assigned on-duty personnel to perform activities to ensure appropriate safety measures have been taken on the road during the winter season. As part of this plan, Mr. Sapar Tentiev was identified as the Road Maintenance Specialist responsible for winter road maintenance. The anti-icing inert materials such as gravel sand mix and salt sand mix have been applied over

the project roadway as the main road safety operation during the cold season. In addition, the road construction equipment has been maintained to ensure the maximum serviceability.

153.Dust formation is a persistent issue during road construction, especially in dry weather. Anthropogenic impact to ambient environment coming from increased levels of particle matters due to transportation and using of sand and sand-gravel compounds. Elevated levels of dust affect businesses of the local community, it settles on shops, cafes, agricultural products and crop yields. Elevated levels potentially might lead to traffic accidents due to poor visibility, to allergy and respiratory diseases in humans, water quality pollution.

154.Mitigation measures applied for minimization of impact from elevated levels of dust during the project work were: water trucks were suppressing dust by watering roads, special intensity of the process applied during the dry and hot weather; the speed of vehicles was limited as by signs obliged it all along the road without pavement; regular technical inspection of vehicle involved to prevent potential exceeding the maximum allowable concentrations of pollutants.

4.6.2 Worker Safety and Health

155. The Contractor prepared and submitted the occupational health and safety plan on February 10, 2022.

156. There were no accidents, incidents that led to problems with the health and safety of employees, as well as incidents related to downtime during the reporting period.

157. Contractor has improved first aid awareness of the assigned personnel and provided the first aid kits in the working area

158. Contractor shall pay more attention toward improving safety performance in the company by conduction safety inductions, mandatory trainings, awareness sessions, knowledge check exercises.

159. All employees working at sites shall be provided with full PPE (coverall, helmets, boots, welding shield and apron, gloves, earmuffs and goggles).

160. Monthly check of critically safety equipment to be carried out (fire extinguishers, sand box and other fire safety equipment, first aid kits etc) by trained personnel.

161. A clean and tidy workplace and work territory help combat a range of different threats. Contractor shall make sure that their safety performance meet compliance requirements established by the Law of the Republic of Kyrgyzstan, and specified in the occupational health and safety plan and other relevant project documents.

4.7 Training.

162. The Contractor's Occupational Health and Safety (OHS) training program, as outlined in the OHS Management Plan (January 2022), consists of the following components:

- Initial orientation to familiarize all workers and staff with OHS, conducted within the first week of their assignment.
- Periodic OHS training sessions held at least once every six months.
- Monthly regular meetings to discuss OHS matters.

• Regular inspections to test, maintain, and inspect safety equipment, such as fire shields, fire extinguishers, barriers, work platforms, winches, ladders, lighting, road signs, personal protective equipment (PPE), and other safety devices.

With the start of construction work in 2024, in the first quarter it is planned to hold a lecture on HIV/AIDS for the Contractor's personnel with the involvement of healthcare practitioners of the regional hospital and ensure the availability of information materials on HIV and STD prevention in booklets, brochures, and posters in Kyrgyz, Chinese and Russian languages in the construction camps (km 106+300 and km 148+630);

163. The introductory orientations are conducted for each new employee, and records of their completion are documented in the "Register of Introduction Briefings on Occupational Safety."

164. In October 2023, the Contractor's Safety Engineer conducted an OHS briefing for all workers, including workers from Pakistan, covering the following topics:

- Safety requirements for earthworks.
- Safety requirements for the installation of reinforced concrete structures.

165. In November 2023, the Contractor's Safety Engineer conducted an occupational health and safety briefing for all workers, including workers from Pakistan, covering the following topics:

• Safety requirements during welding operations.

• General aspects of electrical safety at the production base, construction sites, and camp.

5 SSEMP FUNCTIONING.

5.1 SSEMP Review.

166.The SSEMP was reviewed and approved in December 2021. The document describes the measures proposed under the Project to prevent, minimize or compensate for adverse environmental impacts arising from the Project.

167. The Contractor, represented by Nurdinov Nurlan, responsible for environmental protection, is taking measures to mitigate the consequences potentially arising from construction work. The Consultant's specialists regularly implement the inspections to monitor environment safeguard activities and whether they are following requirements of SSEMP.

168.Based on the identified recurring non-conformances, the Consultant noted that the Contractor does not sufficiently implement mitigation measures such as: ensuring fire safety, removal of oil leaks during repairs of vehicles, at the production sites, and frequent negligence of the requirements for wearing PPE or their parts by local workers.

169. The review of the Contractor's SSEMP and observations on processes while visiting the project area allowed to highlight recommendations. These recommendations are presented in paragraph 7.2 below.

6 GOOD PRACTICE AND OPPORTUNITY FOR IMPROVEMENT.

6.1 Good practice.

170. Mitigation measures described in the SSEMP are sufficient. Example of a good practice is adaptation of the plan and increasing intensity of dust suppression activities on construction work sites due to dry and hot weather in summer. The plan is presented in Annex 2. In addition, rules for safe road maintenance have been developed, and a road maintenance engineer has been appointed to maintain the road during the winter.

171. The Consultant recommends the Contractor to increase the responsibility of the Contractor's personnel and monitor the violations identified during inspections and prevent their recurrence. The Consultant will invite the PIU to conduct joint environmental monitoring at the project site, in order to be able to discuss recurring non-conformities at the site and prepare corrective measures. The Contractor shall be more responsible in protecting the health and safety of workers and eliminating potential risks and hazards.

6.2 Opportunities for Improvement.

172. The Contractor is responsible for environmental compliance, health and safety in working area. Environmental awareness sessions shall be provided on prevention of pollution and contamination from construction activities. The safety mandatory trainings such as safety behavior at workplace, use firefighting equipment, first aid are to be provided and followed up.

173. It is recommended to create emergency response team.

174. Internal inspections & audits should be regularly conducted in order to insure sustainability of performance and prevention of re-occurrences.

7 SUMMARY AND RECOMMENDATIONS.

7.1 Summary.

175. The Contractor obtained all permits from local authorities for the use of quarries and spoil areas and these were reflected in previous reports. During the reporting period, permits were obtained for the expansion of 2 quarries: km 106+420 and km 110+900 (see appendix).

176. Relevant permits have also been received from the local authorities for the production base and camp sites at km 106+300 (see appendix).

177. Reclamation has not been carried out at the 17 designated quarries, as these quarries will continue to be used until the completion of all construction work on the project road section.

178. Increased dust formation observed during heavy traffic and due to the heavy-duty vehicles traffic in the dry weather, in view of this, the intensity of dust suppression was increased to 8 water tanks in summer. In winter the number of water trucks used is 3.

179. Archaeological excavation activities at sites of historical and cultural heritage were implemented following the Protection Zone Plan. Results described in the relevant sections of the Semi-annual Environmental Monitoring Report, January-June 2022 "CAREC Corridors 1 and 3 Connector Road, Section 2B Epkin-Dyikan [Bashkugandy], Km: 89+500 – 159+200 project" and available for readers via the ADB internet site.

180. During the reporting period, one stage of instrumental monitoring was conducted at specified and approved locations (in August and November).

- Equivalent noise levels along the road were within the established sanitary norms (70 dBA), with actual values ranging from 48 to 66 dBA.
- > Vibration levels were below the maximum permissible levels.
- All parameters measured in surface water samples taken at assigned points wire laying within the MAC levels.
- > Air quality parameters for all pollutants were within the permissible limits.

181. During the reporting period, the Contractor identified specific areas with the village administration for planting trees, completed the selection of trees from local forestry enterprises and prepared The tree planting plans.

182. Environmental and safety performance shall be improved in a way to prevent recurrences of non-compliant actions previously identified and closed.

183. Road safety measures undertaken are to be constantly followed up.

7.2 RECOMMENDATIONS.

184. The Contractor is required to develop an internal system of corrective and preventive measures and monitor the effectiveness of corrective measures taken to prevent the recurrence of violations, with particular attention to violations related to personal protective equipment (PPE).

185. As per Appendix (IX) of the SSEMP and the Law of the Republic of Uzbekistan "On Waste" dated April 5, 2002, No. 362-II, a journal should be created/maintained to record the collection and disposal of waste.

186. Under cl. 5.1 and 6.1 of the SSEMP, a Safety and Environmental Protection Training Plan for 2024 should be prepared and followed. In connection with systemic violations in handling waste and oil spills, it is recommended to include training sessions for staff on the following issues:

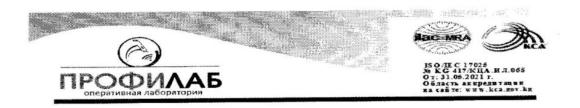
- elimination of oil spills from the soil surface, in accordance with Appendix (viii) "Soil Management Plan";

- waste management in accordance with Appendix (ix) "Solid and Liquid Waste Disposal Plan";

- maintaining cleanliness on the territory of camps, Appendix (xii) "Construction Site and Camps Management Plan".

187. Pursuant to Appendix (VI) of the SSEMP, the Contractor, in accordance with the requirements of the legislation of the Kyrgyz Republic, shall prepare a Quarry Reclamation Plan and conduct its technical and environmental expertise. It is planned that the Contractor will prepare a quarry reclamation project at the end of the 2024 construction season and begin reclamation of quarries that will not be used in the future.

Appendix 1. Noise and vibration measurement outcomes in August 2023



ОсОО «ПрофиЛаб» г. Бишкек, ул. Тоголок-Молдо, 60^a каб. 319. тел.0312325067 e-mail: profilab.ltd@mail.ru

ПРОТОКОЛ ИЗМЕРЕНИЯ ШУМА

№ 21 от «16» августа 2023г.

 Юридическое лицо, индивидуальный предприниматель или физическое лицо, где производятся измерения, адрес: <u>ФКО «Китайская железнодорожная инженерная групповая компания №5»</u> в КР. Нарынская область, Жумгалский и Кочкорский район.

2. Объект, где производятся измерения: <u>Автодорога Жумгал-Кочкор км 89+500 с. Эпкин- км</u> 159+200 Дыйкан

(наименование, фактический адрес)

3.Основание для проведения измерения: Договор № EDSL-019/10

4. Наименование средств из	мерений и свеления	о калибровке измеряемого прибора:
4. Паименование сослеть из		

		Сертифи	Меж			
Наименование средства измерения	Номер	номер	Дата	калибровочный интервал		
Экофизика - 110А	№AB 130044	№ 0053	22.03.2023 г.	12 месяцев		

5. Нормативная документация, в соответствии с которой проводились измерения:

ГОСТ 20444-2014. Транспортные потоки. Методы определения шумовой характеристики., ГОСТ 32847-2014 Дороги автомобильные общего пользования. Требования к проведению экологических изысканий.

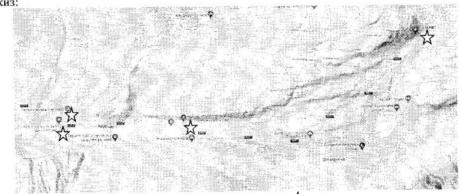
6. Нормативная документация на нормы:

7. Условие окружающей среды: Температура: 21 °С

Влажность: 43 %

8. Источники физических факторов и их характеристики: Транспортный поток.

9. Эскиз:



Места где были произведены замеры. Контрольная точка – 📈 10. Дата произведение измерения: «14» августа 2023 г

страница: 1 из 3

Результаты измерений:

		X	apa	кт	ep i	шум	a				о давл негеом				вных		a	
	Место		По пект ру	в		По енны	м	част	отами	вГи							A)	
N₂	измерений	Широкопол.	Тональный	Постоянный	Колебл.	Прерывис- тый	нипульсный	31,5	63	125	250	500	1000	2000	4000	8000	Уровень звука (ДБА)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
	с. Тугол Сай, ря	цом	C M	ага	314	ном	«K	утма	н» ю	жная	стор	она де	ороги	151-	+000F	см. В	ремя 08:0	
	Широта: 41°58'	56; д	олго	ота	: 7	4°49	'49			1			1					
1	Leq							66	67	51	45	44	43	44	37	32	51 факт	
	Slow max				_												64	
_								5		-								
	Северо-восточн								. Туг	ол-Са	й 149	+000.	Bpen	1 H 08	:30	0		
	Широта: 41° 59	'33''	; До.	11.0	та	: 74º	45	A PROPERTY AND A PROPERTY AND A		T	r	T	1	1				
2	Leq	-		_	_	_		51	47	40	37	30	32	33	30	25	51 факт	
	Slow max	_					_										67	
										<u> </u>								
													1				L	
	с. Куйручук, рядом с магазином "Азамат" .западная сторона км 144+000. Врем										ремя	09:10						
	Широта: 42º 1'3	0; д	олго	та	: 74	1°58'	35											
3	Leq	-						74	64	53	46	45	47	49	46	39	65 факт	
	Slow max						-			ļ	<u> </u>						79	
			L							L	L	L	L					
	с. Жумгал, рядом со школой на дороге. Левая сторона , км- 129+400. Время 09:45 Широта: 42° 42'33; долгота: 75°50'44''.																	
		33;)	цолг	OT	a: 7	5.50)'44			1		10	1.0					
4	Leq	+		-	-	_		52	50	47	42	40	43	47	45	37	52 факт	
	Slow max			_			-		-				-				72	
									Terran mere d	Dasaran	L	L	l		000			
	с. Тугол Сай, ря								н» ю	жная	сторо	она до	роги	1514	-000k	м. Вр	ремя 13:1	
-	Широта: 41°58'	56; д	олго	та	: 7	4°49	49				10	10	20	42	20	20		
5	Leg												38	42	38	29	57 00141	
	and the second se		-	-	-		-	57	51	49	40	40	50		C			
	Slow max							57	51	49	40	40	50				78	
	Slow max																	
	Slow max Северо-восточн							СУ. с						ія 13	:40			
(Slow max Северо-восточн Широта: 41° 59'							СУ. с 51″.	. Туго	ол-Са	й 149	+000.	Врем				78	
6	Slow max Северо-восточн Широта: 41° 59' Leq							СУ. с						ия 13 46	:40 41	37	78 49 факт	
6	Slow max Северо-восточн Широта: 41° 59'							СУ. с 51″.	. Туго	ол-Са	й 149	+000.	Врем			37	78	
6	Slow max Северо-восточн Широта: 41° 59′ Leq Slow max	33";	; Дој	ILO	та	: 74%	45'	СУ. с 51″. 65	. Ту ге 54	ол-Са 45	й 149 39	+000.	Врем 44	46	41	1	78 49 факт 74	
6	Slow max Северо-восточн Широта: 41° 59' Leq Slow max с. Куйручук, ря	33''; Дом	: Дој с ма	1ГО 	та:	: 74º	45' "A	СУ. с 51″. 65 зама	. Ту ге 54	ол-Са 45	й 149 39	+000.	Врем 44	46	41	1	78 49 факт 74	
	Slow max Северо-восточн Широта: 41° 59' Leq Slow max с. Куйручук, ря Широта: 42° 1'3	33''; Дом	: Дој с ма	1ГО 	та:	: 74º	45' "A	СУ. с 51″. 65 зама ′.	54 54	ол-Са 45 падн	й 149 39 ая сто	+ 000. 38 Эрона	Врем 44 км 1	46 44+0	41 00. B	ремя	78 49 факт 74 14:20	
6	Slow max Северо-восточн Широта: 41° 59' Leq Slow max с. Куйручук, ря Широта: 42° 1'3 Leq	33''; Дом	: Дој с ма	1ГО 	та:	: 74º	45' "A	СУ. с 51″. 65 зама	. Ту ге 54	ол-Са 45	й 149 39	+000.	Врем 44	46	41	1	78 49 факт 74 14:20 66 факт	
	Slow max Северо-восточн Широта: 41° 59' Leq Slow max с. Куйручук, ря Широта: 42° 1'3	33''; Дом	: Дој с ма	1ГО 	та:	: 74º	45' "A	СУ. с 51″. 65 зама ′.	54 54	ол-Са 45 падн	й 149 39 ая сто	+ 000. 38 Эрона	Врем 44 км 1	46 44+0	41 00. B	ремя	78 49 факт 74 14:20	
	Slow max Северо-восточн Широта: 41° 59' Leq Slow max с. Куйручук, ря Широта: 42° 1'3 Leq Slow max	33''; ідом 0; до	: Дол с ма олго	110 AF8 T2:	та: зиі 74	10581	45' "A 35'	СУ. с 51″. 65 зама ′. 71	54 r".3a	ол-Са 45 падн 51	й 149 39 ая сто 51	+ 000. 38 эрона 50	Врем 44 км 1 50	46 44+0 45	41 00. B 36	ремя 36	78 49 факт 74 14:20 66 факт 81	
	Slow max Северо-восточн Широта: 41° 59' Leq Slow max с. Куйручук, ря Широта: 42° 1'3 Leq Slow max с. Жумгал, рядо	33''; идом 0; до	с ма олго	1ГО АГА Та: ОЛ(та: зип 74	: 74° ном 1°58′	45' "A 35'	СУ. с 51″. 65 зама ′. 71 оге. J	54 r".3a	ол-Са 45 падн 51	й 149 39 ая сто 51	+ 000. 38 эрона 50	Врем 44 км 1 50	46 44+0 45	41 00. B 36	ремя 36	78 49 факт 74 14:20 66 факт 81	
7	Slow max Северо-восточн Широта: 41° 59' Leq Slow max с. Куйручук, ря Широта: 42° 1'3 Leq Slow max с. Куйручук, ря Широта: 42° 1'3 Leq Slow max с. Жумгал, рядо Широта: 42° 42'	33''; идом 0; до	с ма олго	1ГО АГА Та: ОЛ(та: зип 74	: 74° ном 1°58′	45' "A 35'	СУ. е 51″. 65 зама ′. 71 оге. Ј	. Туго 54 г" .за 61 Іевая	ол-Са 45 падн 51 стор	й 149 39 ая сто 51	+ 000. 38 эрона 50 км- 12	Врем 44 км 1 50 29+40	46 44+0 45 0. BI	41 00. В 36 ремя	ремя 36 15:40	78 49 факт 74 14:20 66 факт 81	
	Slow max Северо-восточн Широта: 41° 59' Leq Slow max с. Куйручук, ря Широта: 42° 1'3 Leq Slow max с. Жумгал, рядо	33''; идом 0; до	с ма олго	1ГО АГА Та: ОЛ(та: зип 74	: 74° ном 1°58′	45' "A 35'	СУ. с 51″. 65 зама ′. 71 оге. J	54 r".3a	ол-Са 45 падн 51	й 149 39 ая сто 51	+ 000. 38 эрона 50	Врем 44 км 1 50	46 44+0 45	41 00. B 36	ремя 36	49 факт 74 14:20 66 факт 81	

страница: 2 из 3

Результаты измерений:

	1	X	apa	кте	ep 1	пум	a		Уровни звукового давления в дБ в октавных полосах со среднегсометрическими									
	Место		іо ект ру	вј		Іо енны	M		отами								Уровень звука (ДБА)	
N₂	измерений	Шароконол.	Тональный	Постоянный	Koncôn.	Прерывис- тый	импульсный	31,5	63	125	250	500	1000	2000	4000	8000		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
-	с. Тугол Сай, ря	цом	см	ага	311	ном	«ŀ	утма	н» ю	жная	сторо	она до	роги	151-	-0001	см. В	ремя 17:2	
	Широта: 41°58'										24.54							
9	Leq							65	62	55	42	40	40	38	32	32	56 факт	
	Slow max	_															68	
	Северо-восточн								. Туг	ол-Са	й 149	+000.	Врем	ıя 17	:50	L		
					-	. 740	145	12111										
	Широта: 41° 59	'33'';	До.	ЛГО	Ta	14	45					1					1 - 0 - 1	
10	Leq	'33'';	До.	ЛГО	Ta	. 74	43	50	45	40	42	40	36	36	32	31		
10		'33'';	До.	ЛГО	12	. /4	43		45	40	42	40	36	36	32	31	50 факт 63	
10	Leq Slow max							50									63	
10	Leq Slow max с. Куйручук, ря	ндом	см	ага	1314	ном	"A	50 									63	
	Leq Slow max	ндом	см	ага	1314	ном	"A	50 									63 18:40	
	Leq Slow max с. Куйручук, ря Широта: 42° 1'3	ндом	см	ага	1314	ном	"A	50 338M8	т" .за	падн	ая сто	орона	км 1	44+0	00. B	ремя	63 18:40	
10	Leq Slow max с. Куйручук, ря Широта: 42° 1'3 Leq	ндом 30; до	с м Элго		13H1 : 74	ном 1°58	"A '35	50 33ama ''. 69	т".за 70	падн 62	ая сто 58	орона 52	км 1	44+0 35	00. B 32	ремя 30	63 18:40 60 факт 72	
	Leq Slow max с. Куйручук, ря Широта: 42° 1′3 Leq Slow max	ндом 80; до	с м)лго	ага эта:	ізи : 74 ой	ном 1°58 на д	"A '35	50 .3ama ''. 69 оге. J	т".за 70	падн 62	ая сто 58	орона 52	км 1	44+0 35	00. B 32	ремя 30 19:30	63 18:40 60 факт 72	
	Leq Slow max с. Куйручук, ря Широта: 42° 1′3 Leq Slow max с. Жумгал, ряде	ндом 80; до	с м)лго	ага эта:	ізи : 74 ой	ном 1°58 на д	"A '35	50 .3ama ''. 69 оге. J	т".за 70	падн 62	ая сто 58	орона 52	км 1	44+0 35	00. B 32	ремя 30	18:40 60 факт 72	

Заключение по результатам замеров: На момент проведения замеров фоновый уровень шума в измеренных точках при движении автотранспортных средств у дороги составляло в дневное время от 49 дБа до 66 дБа.

Должность	ФИО	Подпись
Начальник ОЛ	Аманова Н. Т.	Aug
Технический менеджер/инженер	Нуриддин уулу Т.	frog,

Протокол составлен в двух экземплярах: 1-й экземпляр выдается по месту требования; 2-й экземпляр остается в лаборатории.

Общее количество страниц 3: страница 3 Срок хранения протокола: 4 года

чание: Результаты протокола соответствуют на момент проведённых измерений. Перепечатка протокола без разрешения начальника лаборатории запрешена. Результаты измерений относятся только данным объектам.

Конец протокола



ОсОО «ПрофиЛаб» г. Бишкек, ул. Тоголок-Молдо, 60° каб. 319.

тел.0312325067 e-mail: profilab.ltd@mail.ru

ПРОТОКОЛ ИЗМЕРЕНИЯ ВИБРАЦИИ

№ 17 от «16» августа 2023г.

1. Юридическое лицо, индивидуальный предприниматель или физическое лицо, где производятся измерения, адрес: ФКО «Китайская железнодорожная инженерная групповая компания №5» в КР. Нарынская область, Жумгалский и Кочкорский район.

2. Объект, где производятся измерения: Автодорога Жумгал-Кочкор км 89+500 с. Энкин- км 159+200 Дыйкан

(наименование, фактический адрес) 3.Основание для проведения измерения: Договор № EDSL-019/10

Наименование средств измерений и сведения о калибровке измерясмого прибора:

Laur concernance on a ratio		Сертифи	кат о калибровке	Меж
Наименование средства измерения	Номер	номер	Дата	калибровочный интервал
Экофизика - 110А	NoAB 130044	№ 0053	22.03.2023 г.	12 месяцев

5. Нормативная документация на методы измерений, в соответствии с которой проводилист. измерения: ГОСТ 31319-2006 «Вибрация. Измерение общей вибрации и оценка се воздействия на человека. Требования к проведению измерений на рабочих местах»./ГОСТ 12.1.012-2004

Нормативная документация на нормы: Санитарные нормы 2.2.4./2.1.8.566-96. 6. «Производственная вибрация в помещениях, жилых и общественных зданий»/ГОСТ ИСО 8041-2006

7. Условие окружающей среды: Температура: 21°С

Влажность: 43%

8. Источники физических факторов и их характеристики: Транспортный поток.

9. Эскиз:



10. Дата произведение измерения: «14» августа 2023 г

Общее количество страниц 3: страница 1

INTERNAL. This information is accessible to ADB Management and staff. It may be shared outside ADB with appropriate permission.

Результаты измерений:

		BI	Ви ибра	д ЩИИ		•	окта	авных	о давле полоса	ix co			рректированные и эквивалентные
		06	бщая	a		средн	негеом		ескими Гц	часто	тами	0	орректированные чения и их уровни
N⁰	Место измерений	Транспортная	Транспортно- технологическая	Технологическая	Локальная	7	4	8	16	31,5	63	Час	тотная коррекция Wm (дБ)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	с. Тугол Сай, рядом	и с ма	агаз	ином	M «	Кутма	н» ю	жная	сторо	на дој	роги 1	51+00	0км. Время 08:10
	Широта: 41°58'56;)	цолго	та:	74°4	9'4	9".			1			<u>.</u>	
1	Leq					93	90	87	83	59	58	93	Уровень вибрации
	Slow max] +										99	Макс. Уровень
	Северо-восточная с	сторо	на	АБЗ	и	ЦСУ. с	. Туг	ол-Са	й 149-	+000.	Время	08:40)
	Широта: 41° 59'33"	; Дол	гот	a: 74	1º4	5'51".							
2	Leq					93	90	87	84	56	57	84	Уровень вибрации
	Slow max	+										93	Макс. уровень
	с. Куйручук, рядом						т" .38	падн	ая сто	рона	км 144	1+000.	Время 09:20
	Широта: 42º 1'30; д	олго	та:	74°58	8'3	5".							
3	Leq	4				94	90	87	84	60	60	94	Уровень вибрации
	Slow max	+										100	Макс. уровень
											0.400	D	00.55
	с. Жумгал, рядом с						тевая	стор	она , в	см- 12	9+400	. Врем	19:55
	Широта: 42° 42'33;	долг	ота	75%	50'								
4	Leq	+				94	91	88	85	59	58	93	Уровень вибрации
	Slow max				_							99	Макс. уровень
		1		1.		TC						51.00	0 D 12.2
	с. Тугол Сай, рядом						н»ю	жная	сторо	на до	роги 1	51+00	окм. Время 13:20
_	Широта: 41°58'56; 2	цолго	та:	74°4	9'4		0.0	0.6		60	(0)		
5	Leq				H	94	90	86	80	60	60	95	Уровень вибрации
_	Slow max	+										102	Макс. уровень
-	Северо-восточная с	Topo	на	463	u J	ICV.	Tvr	ол-Са	й 149-	+000	Rnema	13.50	
	Широта: 41º 59'33"						<u> j.</u>	on cu			openin	10.00	
6	Leq	, 400		a. / -		90	88	87	84	58	56	92	Уровень вибрации
0	Slow max	+			ł	,,,	00	07	04	50		98	Макс. уровень
	JIOW IIIAA				10							70	
	с. Куйручук, рядом	1 C M	агаз	инол	M "	Азама	т" .38	падн	ая сто	рона	км 144	++000.	Время 14:30
-	Широта: 42° 1'30; д									· · · · ·			
7	Leq					94	90	87	84	59	56	98	Уровень вибрации
-	Slow max	+			t							104	Макс. уровень
					+								
	с. Жумгал, рядом с	ошк	оло	й на	до	роге.	Іевая	стор	она . н	см- 12	9+400	. Bpey	яя 15:50
	Широта: 42º 42'33;								,				
			-	T		93	90	84	78	56	52	90	Уровень вибрации
8					- 1	15			10	50	24		- Popens phopulan
8	Leq Slow max		+		ſ			1				101	Макс уровень
8	Slow max		+		_							101	Макс. уровень

Общее количество страниц 3: страница 2 У

Результаты измерений:

		BI	Ви ибра	ід ациі	и	Уров			о давле полоса	ения в іх со	дБ в	Ко	рректированные и эквивалентные		
			бща			среди	негеом		ескими Гц	часто	тами		орректированные чения и их уровни		
№	Место измерений	Транспортная	Транспортно-	Технологическая	Локальная	2	4	8	16	31,5	63	Час	тотная коррекция Wm (дБ)		
1	2	3	4	5	6	7	8	9	10	11	12	13	14		
	с. Тугол Сай, рядом						н» ю	жная	сторо	на дој	роги 1	51+00	0км. Время 08:10		
	Широта: 41°58'56;)	юлго	та:	740	49'4	19".						<u>.</u>			
1	Leq					93	90	87	83	59	58	93	Уровень вибрации		
	Slow max	+										99	Макс. Уровень		
	Северо-восточная с						. Туг	ол-Са	й 149	+000.]	Время	08:40)		
	Широта: 41° 59'33"	; Дол	пот	a: 7	4º4	5'51".									
2	Leq					93	90	87	84	56	57	84	Уровень вибрации		
	Slow max	+										93	Макс. уровень		
			L												
	с. Куйручук, рядом						т" .38	падн	ая сто	рона	км 144	1+000.	Время 09:20		
_	Широта: 42º 1'30; д	олго	та:	74%	58'3	5".									
3	Leq	+				94	90	87	84	60	60	94	Уровень вибрации		
	Slow max											100	Макс. уровень		
	с. Жумгал, рядом с		0.70			DOLO	Topog		0.000		0+400	Dna			
							тевая	rerop	ona, i	CM-12	97400	. bpen	IN 09:55		
	Широта: 42º 42'33;	долг	UTA	13	50		91	00	95	59	50	93	V		
4	Leq	+				94	- 91	88	85	39	58	99	Уровень вибрации		
	Slow max			+	_							99	Макс. уровень		
	с. Тугол Сай, рядом	1				IC-uma a						51-00	0 Danca 12.2(
							(H» IU	жная	cropo	на до	JOI N 1	51+00	окм. бремя 13:20		
5	Широта: 41°58'56; д	10.110	na.	/-	47 4	94	90	86	80	60	60	95	Veccau pu5eouru		
3	Leq Slow max	+				94	90	00	00	00	00	102	Уровень вибрации Макс. уровень		
	Slow max											102	макс. уровень		
_	Северо-восточная с	торо	на	АБЗ	3 и Д	ІСУ. с	. Tyr	ол-Са	й 149-	+000.]	Время	13:50)		
	Широта: 41º 59'33"	; Дол	гот	a: 7	404	5'51".									
6	Leq					90	88	87	84	58	56	92	Уровень вибрации		
	Slow max	+	_									98	Макс. уровень		
							т" .38	падн	ая сто	рона	км 144	1+000.	Время 14:30		
	с. Куйручук, рядом с магазином "Азамат" .западная сторона км 144+000. Время 14:30 Широта: 42° 1'30; долгота: 74°58'35''.														
				I I		94	90	87	84	59	56	98	Уровень вибрации		
7	Leq	+			1							104	Макс. уровень		
7		+							2				Make. Jpobenb		
7	Leq Slow max						Пост				0.400	De			
7	Leq Slow max с. Жумгал, рядом си	ошк					Левая	стор	она , и	см- 12	9+400	. Врем			
	Leq Slow max с. Жумгал, рядом с Широта: 42° 42'33;	ошк				44".							ıя 15:50		
7 8	Leq Slow max с. Жумгал, рядом с Широта: 42° 42'33; Leq	ошк					Левая 90	і стор 84	она , н 78	км- 12 56	9+400 52	90	ня 15:50 Уровень вибрации		
	Leq Slow max с. Жумгал, рядом с Широта: 42° 42'33;	ошк	ота			44".							ıя 15:50		

Общее количество страниц 3: страница 2 У

Appendix 2. Noise and vibration measurement outcomes in November 2023



ОсОО «ПрофяЛаб» г. Бишкек, ул. Тоголок-Молло, 60° каб. 319. rea.0312325067 e-mail: profilab.htd@mail.ru

ПРОТОКОЛ ИЗМЕРЕНИЯ ВИБРАЦИИ

№ 22 от «14» ноября 2023г.

 Юридическое лицо, индивидуальный предприниматель или физическое лицо, где производятся измерения, адрес: <u>ФКО «Китайская железнодорожная инженерная групповая</u> компания №5» в КР. Нарынская область, Жумгалский и Кочкорский район.

2. Объект, где производятся измерения: Антодорога Жумгал-Кочкор км 89+500 с. Эпкин- км

159+200 Дыйкан

(наименование, фактический адрес)

3.Основание для проведения измерения: Договор № EDSL-019/10

AAB

4. Наименование средств измерений и сведения о калибровке измеряемого прибора:

		Сертифи	Меж	
Наименование средства измерения	Номер	номер	Дата	калнбровочный интервал
Экофизика - 110А	N2AB 130044	N± 0053	22.03.2023 г.	12 месяцев

 Нормативная документация на методы измерений, в соответствии с которой проводились измерения: ГОСТ 31319-2006 «Вибрация. Измерение общей вибрации и оценка ее воздействия на человека. Требования к проведению измерений на рабочих местах»./ГОСТ 12.1.012-2004

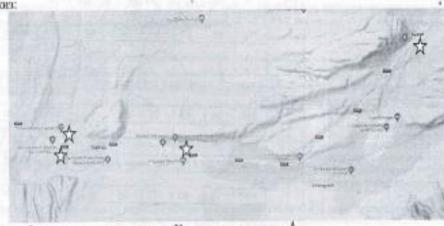
 Нормативная документация на нормы: Санитарные пормы 2.2.4./2.1.8.566-96. «Производственная вибрация в помещениях, жилых и общественных зданий»/ГОСТ ИСО 8041-2006

7. Условне окружающей среды: Температура: 8°С

Влажность: 54%

8. Источники физических факторов и их характеристики: Травспортный поток.

9. Эскиз:



Места где были произведены замеры. Контрольная точка – 🖓 10. Дата произведение измерения: «10» ноября 2023 г

Общее количество страница 3: страница 1

Результаты измерений:

		1000	Вя ебрі	ater	н	10000	OKTRI	ных п триче	олоско скими	ния в J с со частот		Кој	ректированные и квивалентные рректированные
		QC	ina	8				nГ	ц	-	-	3689	ения и их уровни
¥2	Место измерений	Tparcooprase	Thursday	Themas and the second s	Покальная	19	+	00	16	31,5	63	Част	отная коррекция Wa (дБ)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
-	с. Тугол Сай, рядом	C C M	ara	ann	OM (Кутма	HIN 107	ana e	торо	на дор	юги 13	51+000	жм. Время 08:45
	Широта: 41°58'56;	10.111	0T2	74	·49'	49".							
1	Leq	T			10.00	91	89	86	82	58	56	91	Уровень вибрации
-	Slow max	+	1									98	Макс. Уровень
													1
-	Северо-восточная	crope	inter a	AB	З н	ДСУ. с	. Tyre	or-Cai	à 149-	F000, J	Время	09:15	
	Шпрота: 41° 59'33'	'; До.	110	ra;	74%	15'51''.	£.,						
2	Leg	1		T		98	87	77	74	55	54	88	Уровень вибрашни
-	Slow max	+				-				1000		93	Макс. урозень
-						and the second	in and						
-	с. Куйручук, рядол	N C M	ага	3818	IONE	"Азама	(T ²⁾ .39	падно	ы сте	рона	км 14-	4+000.	Время 09:45
-	Широта: 42° 1'30; /	10.111	rra:	74	•58'	35".							
3	Leq		1	T	Π	94	90	86	83	62	52	90	Уровень вибрания
10	Slow max	++							-			97	Макс, уровень
-		1	t	1									
-	с. Жумгал, ридом	eo. 101	an n	oit i	1	opere.	Henzy	стор	0H2 .	км- 12	9+400	. Bpes	ca 10:15
-	Широта: 42º 42'33	co mi	novi	on 7	12021	PAA"	CARGARIES IN	CASE OF					
		; atom	FUL	a: 7	а ан Т	95	91	88	86	60	61	89	Уровень инбрации
4	Leq	++				33	71	00	100			- 95	Макс, уровень
_	Slow max	1000	-	-	-	-			-	-	-		
	THE REPORT OF A DUP O										the second second	Contraction of	
_			1		1	7.7			Industry in the set		aoras 1	151+00	Own Rnews 11:1
-	е. Тугол Сай, рядо	01 C B	ars	1380	ном	«Кутм	2150 50	жная	сторе	ona go	роги]	(51+00	0км. Время 11:1
	Широта: 41°58'56;	м с в долі	(ars	1380 1: 7	ном 4°49	r49".		1.00	ALC: NO				1.
5	Широта: 41°58'56; Leq	долі	TOT:	e: 7	ном 4°49	«Кутм //49/'. 97	215×10	жная 91	сторе 88	она до 62	роги 63	90	Уровень вибрации
5	Широта: 41°58'56;	он е в доли +	(ar)	e: 7	ном 4°49	r49".		1.00	ALC: NO				1.
5	Широта: 41°58′56; Leq Slow max	то <u>л</u> +	COT:	e: 7	4*49	97	94	91	88	62	63	90 96	Уровень вибрации Макс. уровень
5	Широта: 41°58′56; Leq Slow max Северо-восточная	долі + стор	DOR	e: 7	4°49 63 i	97 97 4 ДСУ.	94 e. Tyr	91	88	62	63	90 96	Уровень вибрации Макс. уровень
5	Широта: 41°58′56; Leq Slow max	долі + стор	DOR	e: 7	4°49 63 i	/49". 97 1 ДСУ: 145'51"	94 e. Tyr	91 0.7-C4	88 R 149	62 ++000.	63 Врем	90 96 s 11:4	Уравень вибрации Манг. уровень 5
5	Широта: 41°58′56; Leq Slow max Северо-восточная	долі + стор	DOR	e: 7	4°49 63 i	97 97 4 ДСУ.	94 e. Tyr	91	88	62	63	90 96 s 11:4 79	Уравень вибрации Манс. уровень 5 Уровень вибрации
	Широта: 41°58′56; Leq Slow max Северо-восточная Широта: 41° 59′33	долі + стор	DOR	e: 7	4°49 63 i	/49". 97 1 ДСУ: 145'51"	94 e. Tyr	91 0.7-C4	88 R 149	62 ++000.	63 Врем	90 96 s 11:4	Уравень вибрации Манс. уровень 5 Уровень вибрации
	Широта: 41°58′56; Leq Slow max Северо-восточная Широта: 41° 59′33 Leq Slow max	долі + стор +		a A	4°49 63 i : 74	97 97 1 ДСУ: 45'51'' 101	94 c. Tyr 85	91 0.7-Ca 67	88 48 149 66	62 ++000.	63 Врем 69	90 96 8 11:4 79 85	Уравень вибрации Манс. уровень 5 Уровень вибрации Макс. уровень
	Широта: 41°58′56; Leq Slow max Северо-восточная Широта: 41° 59′33 Leq Slow max	долі + стор *: До +	DOH:	а: 7	4°49 53 i : 74 HOM	/49". 97 1 ДСУ. '45'51'' 101	94 c. Tyr 85	91 0.7-Ca 67	88 48 149 66	62 ++000.	63 Врем 69	90 96 8 11:4 79 85	Уровень вибрации Макс. уровень 5 Уровень вибрации Макс. уровень
	Широта: 41°58′56; Leq Slow max Северо-восточная Широта: 41° 59′33 Leq Slow max	долі + стор *: До +	DOH:	а: 7	4°49 53 i : 74 HOM	/49". 97 1 ДСУ. '45'51'' 101	94 c. Tyr 85	91 0.7-Ca 67	88 48 149 66	62 ++000. 66	63 Врем 69 км 14	90 96 8 11:4 79 85 44+000	Уровень вибрации Маже, уровень 5 Уровень вибрации Маке, уровень Время 12:25
6	Широта: 41°58′56; Leq Slow max Северо-восточная Шарота: 41° 59′33 Leq Slow max с. Куйручук, раде Широта: 42° 1′30;	долі + стој *; До + долі	DOH:	а: 7	4°49 53 i : 74 HOM	/49". 97 1 ДСУ. '45'51'' 101	94 c. Tyr 85 ar ^m .3	91 0.7-Ca 67	88 48 149 66	62 ++000.	63 Врем 69	90 96 8 11:42 79 85 44+000 88	Уровень вибрации Маже, уровень 5 Уровень вибрации Маке, уровень Время 12:25 Уровень побрации
	Широта: 41°58′56; Leq Slow max Северо-восточная Широта: 41° 59′33 Leq Slow max с. Куйручув, рало Широта: 42° 1′30; Leq	долі + стор *: До +	DOH:	а: 7	4°49 53 i : 74 HOM	и 49". 97 1 ДСУ. 45'51'' 101 1 "Азам '35''.	94 c. Tyr 85 ar ^m .3	91 0.7-Ci 67 анады	88 66 149	62 ++000. 66	63 Врем 69 км 14	90 96 8 11:4 79 85 44+000	Уровень вибрации Маже, уровень 5 Уровень вибрации Маке, уровень Время 12:25 Уровень побрации
6	Широта: 41°58′56; Leq Slow max Северо-восточная Шарота: 41° 59′33 Leq Slow max с. Куйручук, радо Широта: 42° 1′30; Leq Slow max	доли + стој ": Да + доли +		а: 7	4°49 63 1 : 74 HOM 4°58	49". 97 45'51" 101 145'51" 101 135". 103	94 c. Tyr 85 arr".3 99	91 0.7-Ci 67 ana.ni 96	88 66 68 93	62 ++000. 66 000018	63 Врем 69 км 14 63	90 96 8 11:42 79 85 14+000 88 95	Уровень вибрации Маже. уровень 5 Уровень вибрации Маке. уровень Время 12:25 Уровень вибрации Маке. уровень
6	Широта: 41°58′56; Leq Slow max Северо-восточная Шарота: 41° 59′33 Leq Slow max с. Куйручук, радо Широта: 42° 1′30; Leq Slow max	доли + стој ": Да + доли +		а: 7	4°49 63 1 : 74 HOM 4°58	49". 97 45'51" 101 145'51" 101 135". 103	94 c. Tyr 85 arr".3 99	91 0.7-Ci 67 ana.ni 96	88 66 68 93	62 ++000. 66 000018	63 Врем 69 км 14 63	90 96 8 11:42 79 85 14+000 88 95	Уровень вибрации Маже. уровень 5 Уровень вибрации Маке. уровень Время 12:25 Уровень вибрации Маке. уровень
6	Широта: 41°58′56; Leq Slow max Северо-восточная Широта: 41° 59′33 Leq Slow max с. Куйручув, рало Широта: 42° 1′30; Leq Slow max с. Жумгал, рялом	долі + + стор : Да + + доли + +	NOT:	a: 7	4°49 63 1 : 74 BOM 4°58	49". 97 45'51" 101 1"Азам '35". 103 авроге.	94 c. Tyr 85 arr".3 99	91 0.7-Ci 67 ana.ni 96	88 66 68 93	62 ++000. 66 000018	63 Врем 69 км 14 63	90 96 8 11:42 79 85 14+000 88 95	Уровень вибрации Маже. уровень 5 Уровень вибрации Маке. уровень Время 12:25 Уровень вибрации Маке. уровень
6	Широта: 41°58′56; Leq Slow max Северо-восточная Широта: 41° 59′33 Leq Slow max с. Куйручув, разо Широта: 42° 1′30; Leq Slow max с. Жумгал, рядом Широта: 42° 42′3;	долі + + стор : Да + + доли + +	NOT:	a: 7	4°49 63 1 : 74 BOM 4°58	49". 97 445'51" 101 1"Азам "35". 103 103 аороге. 50'44".	94 с. Тут 85 ат ^т .3 99	91 0.7-Ci 67 ana,ni 96 s eroj	88 66 149 66 93 93	62 +000. 66 орона 62 км- 1	63 Врем 69 км 14 63 29+40	90 96 96 97 85 11:42 85 44+000 88 95 0, Bpe	Уровень вибрации Мажс. уровень 5 Уровень вибрации Макс. уровень Время 12:25 Уровень пибрации Макс. уровень мя 12:55
6	Широта: 41°58′56; Leq Slow max Северо-восточная Шарота: 41° 59′33 Leq Slow max с. Куйручук, радо Широта: 42° 1′30; Leq Slow max с. Жумгал, рядом Широта: 42° 42′33 Leq	долі + + стор : Да + + доли + +		a: 7	4°49 63 1 : 74 BOM 4°58	49". 97 45'51" 101 1"Азам '35". 103 авроге.	94 c. Tyr 85 	91 0.7-Ci 67 ana.ni 96	88 66 68 93 93	62 +000. 66 орона 62 62 км- 1	63 Врем 69 км 14 63 29+40	90 96 96 97 85 11:42 85 44+000 88 95 0, Bpe	Уровень вибращии Макс. уровень 5 Уровень вибращии Макс. уровень Время 12:25 Уровень вибращии Макс. уровень мя 12:55
6	Широта: 41°58′56; Leq Slow max Северо-восточная Широта: 41° 59′33 Leq Slow max с. Куйручув, разо Широта: 42° 1′30; Leq Slow max с. Жумгал, рядом Широта: 42° 42′3;	долі + + стор : Да + + доли + +		a: 7 a A ora a38 a38 a38 a38 a38 a38 a38 a38 a38 a3	4°49 63 1 : 74 BOM 4°58	49". 97 445'51" 101 1"Азам "35". 103 103 аороге. 50'44".	94 с. Тут 85 ат ^т .3 99	91 0.7-Ci 67 ana,ni 96 s eroj	88 66 149 66 93 93	62 +000. 66 орона 62 62 км- 1	63 Врем 69 км 14 63 29+40	90 96 96 8 11:42 79 85 44+000 88 95 0. Bpc 86	Уровень вибращии Мажс. уровень 5 Уровень вибрации Макс. уровень Время 12:25 Уровень вибрации Макс. уровень мя 12:55

87

Результаты измерений:

		BJ	Ви нбра		ĸ		OKTZ	BHEIX	nonoca	сния в IX со 1 часто	2002	1 65	рректированные и эквивалентные орректированные		
		00	ົກແລະ	8		open	Tel CON		Гц	1 - 30-10	1.8909	1.1.1.1.2.5	начения и их уровни		
Ne	Место измерений	Траклортия	Трантерин	Teasonmental	Лоюльния	7	4	8	16	31,5	63	Час	тотная коррекция Wn (дБ)		
1	2	3	4	5	6	7	8	.9	10	11	12	13	14		
	с. Тугол Сай, рядо	61 C 3	tara	388	IOM	diym	13H> P	ожная	а стор	она д	ороги	151+0	00км. Время 13:3		
	Широта: 41°58'56;									200	1000				
9	Leq					93	88	84	56	58	51	92	Уровень выбращии		
	Slow max	+					_		_			100	Макс. Уровень		
	Северо-восточная	стор	юна	Ab	63 н	дсу.	e. Ty	гол-С	'aii 14	9+000	. Bpew	isi 14:0	5		
	Широта: 41° 59'33	"; Jo	MITO	та:	74%	45'51"				1.07					
10	Leq		100.1			90	84	80	51	51	52	90	Уровень вибрации		
	Slow max	+									-	95	Макс. уровень		
-	с. Куйручук, рядо	MCM	4373	388	IOM	"Азам	ERT" .3	anan	ная ст	орона	а км 1-	44+00	0. Время 14:35		
	Широта: 42° 1'30;														
11	Lea	10.00				95	88	83	60	51	66	94	Уровень вибрации		
	Slow max	+										- 99	Макс. уровень		
-	с. Жумгал, рядом	co m	KOJ	oit	18.0	opore.	Лева	я сто	рона.	км- 1	29+40	0. Bpc	мя 15:15		
	Широта: 42° 42'33														
12	Leg			T		88	83	78	78	56	61	88	Уровень вибрации		
	a state the second s	+										98	Макс, уровень		

Заключение по результатам замеров: По результатам инструментальных замеров уровень вибрации от транспортного потока на автодорогах составляет от 79 дБ до 94 дБ.

Санитарные нормы 2.2.4./2.1.8.566-96. «Производственная вибрация, вибрация в помещениях, жилых и общественных зданиях»

Должность	0N0	Подпись
Генеральный директор	Буланбеков И. А.	Art
Начальник ОК	Аманова Н. Т.	St
МП	Общее количест	яр оставтся в лабораторин, во страниц 3: страница 3 кранения протокола: 4 года проведённых измерений, лаборатории запрещена.
	Конец протоколя	





ОсОО «ПрофиЛаб» г. Бишкек, ул. Тоголок-Молдо, 60⁸ каб. 319. rea.0312325067 e-mail: profilab.ltd@mail.ru

ПРОТОКОЛ ИЗМЕРЕНИЯ ШУМА

№ 26 от «14» воября 2023г.

 Юридическое лицо, индивидуальный предприниматель или физическое лицо, где производятся измерения, адрес: <u>ФКО «Китайская железиодорожная инженерная групповая компания №5»</u> в КР. Нарынская область, Жумгалский и Кочкорский район.

 Объект, где производятся измерения: <u>Автопорога Жумгал-Кочкор км 894500 с. Энкин- км</u> 1594-200 Полётичи.

159+200 Дыйкан

(наименование, фактический адрес)

3. Основание для проведения измерения: Договор № EDSL-019/10

4. Наименование средств измерений и сведения о калибровке измеряемого прибора:

Наименование средства		Сертифи	кат о калибровке	Mess
измерения	Номер	номер	Дата	калибровочный интервал
Экофизика - 110А	MAB 130044	No 0053	22.03.2023 г.	12 месяцев

5. Нормативная документация, в соответствии с которой проводились измерения:

ГОСТ 20444-2014. Транспортные потоки. Методы определения шумовой характеристики., ГОСТ 32847-2014 Дороги автомобильные общего пользования. Требования к проведению экологических изысканий.

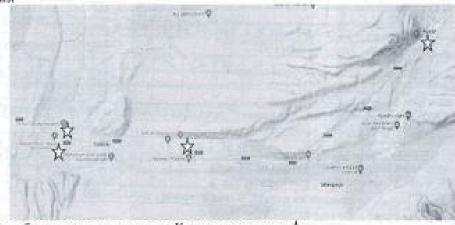
6. Нормативная документация на нормы:

7. Условие окружающей среды: Температура: 8 °С

Влажность: 54 %

8. Источники физических факторов и их характеристики: Транспортный поток.

9. Эскиз:



Места где были произведены замеры. Контрольная точка - 🔆 10. Дата произведение измерения: «10» ноября 2023 г

страница: 1 из 3

Результаты измерений:

		1.00	1.00	ere	p s	цума	A	00.100	23 00	средні	давлен Пермет	на в. гричес	KRMH.	s na po	FOR A		8
	Место	(I) cost p	100	вр		io Hintar		часто	гами в	ε Γu	_	_	_	-			N IN IN
1	нзмерений	Bepression.	Terranettell	Bernmuth	Keneda.	Departmen-	International In	31,5	8	125	150	905	1000	2000	4000	8000	Уровена, заука (ДБА)
_	7	17	-	-	6	7	8		10	11	12	13	14	15	16	17	18
-	2 с. Тугол Сай, р:	anow	e Mi	ara	300	HOM	ab	утма	KOI «I	snas -	сторо	на дој	роги	151+	0000	м. Вр	емя 08:30
	Широта: 41*58'	56: д	0.117	013	: 7	4°49	14	μ.							-	-	
	Log	11	244				1	67	69	53	49	45	46	45	3.8	33	54 факт
-	Slow max	11										-	1.212	-	-	_	63
	- Martin Contractor															_	
-	Северо-восточи	ая с	TOD	она	A	63 1	ı J	СУ. с	. Tyre	pa-Ca	ñ 149-	+000.	Врем	n 09	:00		_
	Широта: 41° 59	133"	До	are	(Ta	: 74	45	'51".	-	-			1.100	-	1		
2	Lea							51	48	41	38	31	32	34	31	28	52 факт
	Slow max							1000100	and the second	i lan in	and the	alley.	1			-	62
						100										-	
-										1.4		-	1.1		1.000	_	
-	с. Куйручук, р	SIJON	i e M	ara	43R		1.1	Азама	a" .35	(IIA)(B	ая сто	poua	KM I	44+0	00. B	ремя	09:30
-	Широта: 42° 1	30: n	0.317	012	: 7	4958	133	5".		100.0	199	1000	1000	110110	1 march	and shares	Contractor and the second
3	Leg			1	Г	1	Г	51	51	45	42	40	41	43	42	30	50 факт
.2	Slow max	-					T				15.35	-	-				60
-	Access of the second second			1	t	-	t	1				1.5		1		1.00	
_	с. Жумгал, ряд	LOM C	a m	ien.	ioł	i Ha	80	nore	Леваз	а стор	юна,	км- 1	29+41)0. B	ремя	10:0)
-	Широта: 42* 4	2122-	30.2	ind d	nia t	750	50'	44".		1				1.11	1.1.1	100	in the second second
4	Leq	- 100 g	jai, see a		T	T	Ť	58	50	48	41	-40	36	42	39	30	56 факт
2	Slow max	-		+	1		t							-			63
_	to be an and the second	-		1	1	-	t	-	-								1
-	с. Тугол Сай, ј			ant in	10.10	11103	4 A	KYTM	ano n	OKHAS	стор	она до	Броги	151	+000	км. В	ремя 11:0
-	Illupora: 41°58	anner Mari	n s n hao m	FOT	ni ing	7.46.4	9%	19".				-		1			1
	широта: 41.26	S. although					12 M							-	33	25	55 @akt
	T	20102	1	T	T	141-4	T	75	64	55	55	48	46	45	3.2	Server .	
5	Leq	200		-	Ī		T	75	64	55	55	48	46	45	3.3	-	83
5	Slow max						-	75	-	-				-	-		83
5	Slow max						-	75	-	-				-	-		83
5	Slow max Cenepo-norrow	IHAS	сто	POH		463	H	75 ДСУ.	e. Tyi	-				-	-		83
	Slow max Cesepo-socro- Illapora: 41° 5	IHAS	сто	POH		463	H	75 ДСУ. 5'51''	e. Tyi	гол-С	aŭ 149)+000		-	1:30		
5	Slow max Cenepo-norrow Широта: 41° 5 Leq	IHAS	сто	POH		463	H	75 ДСУ.	e. Tyi	-	aŭ 149		. Bpe	MIR 1	1:30		
	Slow max Cesepo-socro- Illapora: 41° 5	IHAS	сто	POH		463	H	75 ДСУ. 5'51''	e. Tyi	гол-С	aŭ 149)+000	. Bpe	MIR 1	1:30		52 факт
	Slow max Cenepo-noero Illinpora: 41° 5 Leq Slow max	HAM 59'33'	стој ';Д	рон	IA D	A 53 a: 7	H. 494	75 ДСУ. 5'51'' 53	e. Tyi	гол-С	aŭ 149 36	27	. Bpe	мя 1 30	1:30	23	52 факт 63
	Slow max Cesepo-socrov Illupora: 41° 5 Leq Slow max	1848 59'33'	стој ";Д	оли		A 53 a: 7	H 4°4	75 ДСУ. 5'51'' 53	e. Tyi	гол-С	aŭ 149 36	27	. Bpe	мя 1 30	1:30	23	52 факт 63
6	Slow max Cenepo-noerov III upora: 41* 5 Leq Slow max c. Kyūpyчyk, III upora: 42*	1848 59'33'	стој ";Д	оли		A 53 a: 7	H 4°4	75 ACY. 5'51'' 53 "A3am 35''.	e. Tyr 44 ar ⁿ .J	43	ай 149 36 ная ст	27 27	. Вре 30 а км	мя 1 30	1:30 25 000.	23 Врем	52 фак 63 g 12:10
	Slow max Cenepo-noerov Illupora: 41° 5 Leq Slow max e. Kyiipysyk, Illupora: 42° 1 Leq	1848 59'33'	стој ";Д	оли		A 53 a: 7	H 4°4	75 ДСУ. 5'51'' 53	e. Tyr 44 ar ⁿ .J	гол-С	ай 149 36 ная ст	27	. Bpe	мя 1 30	1:30 25 000.	23 Врем	52 фак 63 g 12:10
6	Slow max Cenepo-noerov III upora: 41* 5 Leq Slow max c. Kyūpyчyk, III upora: 42*	1848 59'33'	стој ";Д	оли		A 53 a: 7	H 4°4	75 ACY. 5'51'' 53 "A3am 35''.	e. Tyr 44 ar ⁿ .J	43	ай 149 36 ная ст	27 27	. Вре 30 а км	мя 1 30	1:30 25 000.	23 Врем	52 фак 63 я 12:10 48 фак
6	Slow max Cesepo-socrov Illupora: 41* 5 Leq Slow max c. Kyñpyчyk, Illupora: 42* Leq Slow max	11:30 1/30;	стој	рон оли мал	18 / /01	аБЗ а: 7	H 4º4	75 A CY. 5'51'' 53 "A3am 35''. 68	e. Tyr 44 ar" ,3	43 1000000	aii 145	27 0000 34	. Вре 30 а км 34	30 1444	1:30 25 000.	23 Врем 20	52 фак 63 я 12:10 48 фак 54
6	Slow max Cenepo-noerro- Широта: 41° 5 Leq Slow max c. Kyйручук, Широта: 42° 1 Leq Slow max	enasi 59'33' psillo 1'30;	стој	рон	18) 0 T	A53 a:7 3880 74%	H 4º4	75 JICY. 5'51'' 53 *A3am 35''. 68 00000000000000000000000000000000000	e. Tyr 44 ar" ,3	43 1000000	aii 145	27 0000 34	. Вре 30 а км 34	30 1444	1:30 25 000.	23 Врем 20	52 факт 63 я 12:10 48 фак 54
6	Slow max Cesepo-socrov Широта: 41° 5 Leq Slow max c. Kyйpyчук, Широта: 42° Leq Slow max c. Жумгал, ря Широта: 42°	enasi 59'33' psilio 1'30;	стој	рон	18) 0 T	A53 a:7 3880 74%	H 4º4	75 ACV. 5'51'' 53 "A3am 35". 68 0pore. '44".	е. Тут 44 ат ^е . 3 51 Лева	43 43 43 45 45	ай 149 36 ная ст 37 рона	27 0000 34	. Вре 30 а км 34 129+-	30 30 144+	1:30 25 000. 19 Врем	23 Врем 20 я 12:-	52 факт 63 8 12:10 48 фак 54 40
6	Slow max Cesepo-socrov Широта: 41° 5 Leq Slow max c. Kyйpyчук, Широта: 42° Leq Slow max c. Жумгал, ря Широта: 42°	enasi 59'33' psilio 1'30;	стој	рон	18) 0 T	A53 a:7 3880 74%	H 4º4	75 JICY. 5'51'' 53 *A3am 35''. 68 00000000000000000000000000000000000	е. Тут 44 ат ^е . 3 51 Лева	43 43 43 45 45	ай 149 36 ная ст 37 рона	27 0000 34	. Вре 30 а км 34	30 30 144+	1:30 25 000. 19 Врем	23 Врем 20 я 12:-	52 факт 63 8 12:10 48 фак 54 40

страница: 2 из 3

INTERNAL. This information is accessible to ADB Management and staff. It may be shared outside ADB with appropriate permission.

1	6	-		RT	p	шум	a						в дБ в ескнин		ных		1993
	Место		lo ext R		- C. T	По енны	н		отами			24					(V)
Ni	измерений	Illeposonan	Tournant	Becomment	Korda.	Elpepanne-	PROPERTY INC.	31,5	8	125	250	500	1000	2000	4000	8000	Уронень звука (ДБА)
1	2	3	4	5	6	7	8	9	10	11	12	IJ	14	15	16	17	18
	с. Тугол Сай, ря								10+10	жная	сторе	на до	ороги	151	-000ĸ	м. Вр	ремя 13:20
	Illupora: 41°58'	56; д	0.11	012	: 7	4°49	149	M".									
9	Leq		- 1			1	1.1	61	60	51	40	39	37	36	30	30	52 факт
	Slow max		_		_			100.00									65
	Северо-восточи	an c	rop	она	A	63 I	ıД	су. с	Typ	ол-Са	uii 149	+000.	Bpen	IR 13	:50	-	
													1000				
	Широта: 41° 59	33 ;	10	H10	1.14	i /#	45	51".									
0	Leq	33	<u>40</u>	are	Tab	: 74	45	50	46	41	41	40	36	33	28	25	48 факт
0		33 3	до	are	1.10	: //	45			41	41	40	36	33	28	25	48 факт 59
10	Leq Slow max							50	46								59
0	Leq Slow max е. Куйручук, ря	agom	¢ M	812	31	HOM	"A	50 .3ama	46								59
	Leq Slow max с. Куйручук, ря Широта: 42° 1'3	agom	¢ M	812	31	HOM	"A	50 .3ama	46 T ^{**} .38	пади	ая сто	орона	км 1	44+0	00. B	ремя	59
	Leq Slow max e. Куйручук, ps Широти: 42° 1'3 Leq	agom	¢ M	812	31	HOM	"A	50 .3ama	46								59 14:20 50 факт
	Leq Slow max с. Куйручук, ря Широта: 42° 1'3	agom	¢ M	812	31	HOM	"A	50 .3ama	46 T ^{**} .38	пади	ая сто	орона	км 1	44+0	00. B	ремя	59
	Leq Slow max e. Куйручук, ps Широти: 42° 1'3 Leq	адом 80; до	¢ M	a12	311 : 7-	ном \$*58	"A	50 3ама ". 62	46 T ^{**} .33	пади 61	an ere 57	орона 52	км 1 40	44+0	00. B 30	ремя 28	59 14:20 50 факт 62
	Leq Slow max c. Куйручук, ря Широта: 42° 1'3 Leq Slow max	адом 30; до	e M	a12 074	ан : 7-	ном \$*58	"A '35	50 3ama ". 62 ore. J	46 T ^{**} .33	пади 61	an ere 57	орона 52	км 1 40	44+0	00. B 30	ремя 28	59 14:20 50 факт 62
10	Leq Slow max c. Куйручук, ря Широта: 42° 1'3 Leq Slow max c. Жумгал, рядо	адом 30; до	e M	a12 074	ан : 7-	ном \$*58	"A '35	50 3ama ". 62 ore. J	46 T ^{**} .33	пади 61	an ere 57	орона 52	км 1 40	44+0	00. B 30	ремя 28	59 14:20 50 факт 62

Заключение по результатам замеров: На момент проведения замеров фоновый уровень шума в измеренных точках при движении автотранспортных средств у дороги составляло в дневное время от 48 дБа до 58 дБа.

Должность	ФИО	Подпись
Генеральный директор	Буланбеков И. А.	and
Начальник ОК	Аманова Н. Т.	A24

 Притокол составлен в двух экземплярах: 1-й экземпляр выдается по месту требовання; 2-й экземпляр остается в лаборатории.

Общее количество страниц 3: страница 3

Срок хранения протокола: 4 года

Перепечатка протокола соответствуют на момент проведенных измерений. Перепечатка протокола без разрешения начальника лаборатории запрещена. Результяты измерений относится только данным объектам.

Конец протокода

MB

INTERNAL. This information is accessible to ADB Management and staff. It may be shared outside ADB with appropriate permission.



Аттестат аккредитации №КG417/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 ВОДЫ

№ 388 - 390

1. Наименование предприятия, организации (заявитель):

Нарынская область, Жумгальский район, Альтернативная дорога Север-Юг, КОО "Китайская железнодорожная инженерная компания №5 в Кыргызской Республике".

2. Регистрационный номер и место отбора проб:

<u>388 — речка Чалай суу;</u> <u>389 — с. Куйручук БСР;</u> <u>390 — с. Куйручук, ирригоционный канал.</u>

3. Дата и время отбора проб:

<u>16.08.2023г с 12 часов 00 минут.</u>

4. Нормативный документ:

<u>Правила охраны поверхностных вод КР от 14 марта 2016-год №128; ПНД</u> <u>Ф 12.15.1-08 Методическая указания по отбору проб для анализа сточных</u> <u>вод.</u>

№	Наименование	Ед.	Данные анали	іза по точкам	Πļ	ĮК	НД	Испытани	Испытания
п/п	определяемого	изм.	01-388-23	01-389-23	+	++	на метод	я провел	проверил
	показателя						испытаний		
1	Нефтепродукты	мг/л	<0,005	<0,005	0,05	0,3	ПНД Ф 14.1:2:4.128-		
							98	Баялы к Б.	Жолчубекова
2	Биохимическое	мгО/л	2,40±0,62	3,20±0,83	3,0	4	ПНД Ф	Жунусова	Г.К.
	потребление						14.1:2:3:4.123-97	A.A.	1.10
	кислорода (БПК5)								
3	Взвешенные	мг/л	3,60±1,08	4,80±1,44	Увел. 0	,25/0,75	ПНД Ф 14.1:2:3.110-		
	вещества						97	Жунусова	Баялы к Б.
4	Прозрачность*	СМ	45,00	46,00	-	-	СЭВ ч.1 М.1977	A.A.	

№	Наименование	Ед.	Данные анализа по	ПД	ίĸ	НД	Испытани	Испытания
п/п	определяемого	H 3M.	точкам			на метод испытаний	я провел	проверил
	показателя		01-390-23	+	++			
1	Нефтепродукты	мг/л	<0,005	0,05	0,3	ПНД Ф 14.1:2:4.128-98		
							Баялы к Б.	
2	Биохимическое	мгО/л	$2,90\pm0,75$	3,0	4	ПНД Ф 14.1:2:3:4.123-97	Жунусова	DTC C
	потребление							Жолчубекова
	кислорода (БПК5)						A.A.	Г.К.
3	Взвешенные	мг/л	3,20±0,96	Увел. 0,	25/0,75	ПНД Ф 14.1:2:3.110-97		
	вещества						Жунусова	Баялы к Б.
4	Прозрачность*	СМ	46,00	-	-	СЭВ ч.1 М.1977	A.A.	

Правила охраны поверхностных вод Кыргызской Республики от14 марта 2016 год № 128

+Перечень ПДК для рыбохозяйственного водопользования

++Перечень ПДК хозяйственно-питьевого и культурно-бытового водопользования

Постановление Правительства КР от 11 апреля 2016г. №201

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 химического анализа, в пробах воды превышения ПДК (предельно допустимые концентрации) для культурно бытовой категории не обнаружено.

*-Вне аккредитации.

Протокол оформил: Главный специалист ОАМКОП

Илиясов У. О.

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

Конец протокола.

95

Appendix 4. Water quality analysis outcomes in November 2023



Аттестат аккредитации №КG417/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 ВОДЫ

№ 563 - 565

1. Наименование предприятия, организации (заявитель):

<u>Нарынская область Жумгальский район, КОО "Китайская</u> железнодорожная инженерная групповая компания №5"

- Регистрационный номер и место отбора проб: <u>563 – речка Чалай, возле ДСУ км 106+300 справа;</u> <u>364 – БСР, км 140+600, с. Куйручук;</u> 365 – Ирригационный канал, км 141+874, с. Куйручук.
- Дата и время отбора проб: 23.11.2023г. с 12 часов ООминут.
- Нормативный документ: <u>Правила охраны поверхностных вод КР от 14 марта 2016-год №128; ПНД</u> <u>Ф 12.15.1-08 Методическая указания по отбору проб для анализа сточных</u> <u>вод.</u>
- 5. Дата(ы) проведения испытаний: <u>24.11 04.12.2023 г.</u>
- 6. Результаты испытаний:

Стр. 1 из 2

№	Наименование	Ед.	Данные	анализа по т	очкам	пд	К	нд	Испытания	Испытания
п/п	определяемого показателя	ИЗМ.	01-563-23	01-564-23	01-565-23	+	++	на метод испытаний	провел	проверил
1	Нефтепродукты	мг/л	<0,005	<0,005	<0,005	0,05	0,3	ПНД Ф 14.1:2:4.128- 98		
2	Биохимическое потребление кислорода (БПК5)	мгО/л	3,00±0,78	3,55±0,92	2,99±0,78	3,0	4	ПНД Ф 14.1:2:3:4.123-97	Баялы к Б. Абдыралиева А.А.	Кутманбаева Г.К.
3	Взвешенные вещества	мг/л	2,80±0,84	2,40±0,72	2,00±0,60	Увел. 0,2	25/0,75	ПНД Ф 14.1:2:3.110- 97		
4	Прозрачность	СМ	45,00	42,00	47,00	-	-	СЭВ ч.1 М.1977*		

Правила охраны поверхностных вод Кыргызской Республики от14 марта 2016 год № 128

+Перечень ПДК для рыбохозяйственного водопользования

++Перечень ПДК хозяйственно-питьевого и культурно-бытового водопользования Постановление Правительства КР от 11 апреля 2016г. №201

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 химического анализа, в пробах воды превышения ПДК (предельно допустимые концентрации) для культурно бытовой категории не обнаружено.

*-Вне аккредитации.

Протокол оформила: Заведующая ОАМКОП

Дарбакова А.С.

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

Конец протокола.

Стр. 2 из 2 АКТИВ

Appendix 5. Air quality analysis outcomes in August 2023



Аттестат аккредитации №КG417/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

№ 280 - 284

- 1. Наименование предприятия, организации (заявитель): <u>Нарынская область, Жумгальский район, Альтернативная дорога север-юг,</u> <u>КОО, "Китийская железно-дорожная компания №5" в Кыргызской</u> <u>Республике.</u>
- Регистрационный номер и место отбора проб: <u>280 – Вторая база 106+300;</u> <u>281 – с. Жумгал возле школы;</u> <u>282 – с. Куйручук возле магазин «Азамат»;</u> <u>283 – с. Тугол-Сай возле магазин «Кутман»;</u> <u>284 – с Тугол-Сай северо-восточная сторона АБВ и ДСУ.</u>
- **3.** Дата и время отбора проб: 16.08.2023г с 12:00.

10.00.20252 € 12.00.

4. Нормативный документ:

<u>ГОСТ 17.2.4.06 – 90 «Охрана природы. Атмосфера. Методы определения</u> скорости и расхода газопылевых потоков, отходящих от стационарных источников газопаления». <u>ГОСТ 17.2.4.07 – 00 «Остача природ</u>и. Акт Что!

Испытания провернл			Райкеева Р.Н.		Испытания проверил
Испытания провел			Жолдошбекова З.Ж.		Испытания провел
ПДК* макс. раз., мг/м ³	0,5	0,085	5,0	0,5	ПДК* макс. раз., мг/м ³
Данныс анализа по точкам, мг/м ³	0,023±0,003	0,045±0,008	1,5±0,3	0,242±0,060	Данныс анализа по точкам, мг/м ³
Код пробы	03-280-23	03-280-23	03-280-23	03-280-23	Код Пробы
НД на метод испытаний	РД 52.04.186-89	РД 52.04.186-89	СТП ДЭМ 03-01-2021, СТП ЛЭМ 03-00-2021	РД 52.04.186-89	НД на метод испытаний

Райкеева Р.Н. Жолдошбекова З.Ж. 0,085 0,5 5,0 0,5 0,016±0,002 0,039±0,007 0,322±0,081 1,7±0,3 03-281-23 03-281-23 03-281-23 03-281-23 СТП ДЭМ 03-01-2021, СТП ДЭМ 03-02-2021 РД 52.04.186-89 РД 52.04.186-89 РД 52.04.186-89

Crp. 2

INTERNAL. This information is accessible to ADB Management and staff. It may be shared outside ADB with appropriate permission.

Испытания проверил			Райкеева Р.Н.	
ировел			Жолдошбекова З.Ж. Р	
ПДК* макс. раз., мг/м ³	0,5	0,085	5,0	0,5
Данные анализа по точкам, мг/м ³	0,038±0,005	0,052±0,009	1,6±0,3	0,161±0,040
Код пробы	03-282-23	03-282-23	03-282-23	03-282-23
Ц Іспытаний	68-93	68-93	03-01-2021, 03-02-2021	6-89

д спытаний	код пробы	данные анализа по точкам, мг/м ³	MAKC. Pa3., MI/M ³	провел	проверил
6-89	03-283-23	0,042±0,005	0,5		
6-89	03-283-23	0,043±0,008	0,085		
)3-01-2021,)3-02-2021	03-283-23	1,6±0,3	5,0	Жолдошбекова 3.Ж.	Райкеева Р.Н.
6-89	03-283-23	0,161±0,040	0,5		

-

INTERNAL. This information is accessible to ADB Management and staff. It may be shared outside ADB with appropriate permission.

100

Нанменование определяемого показателя	НД на метод испытаций	Код пробы	Данныс анализа по точкам, мг/м ³	ПДК* макс. раз., мг/м ³	Испыттания провел	проверил
Диоксид серы	РД 52.04.186-89	03-284-23	0,034±0,004	0,5		
Диоксид азота	РД 52.04.186-89	03-284-23	0,067±0,012	0,085		
Оксид углерода	СТП ДЭМ 03-01-2021, СТП ДЭМ 03-02-2021	03-284-23	1,4±0,3	5,0	Жолдошбскова 3.Ж.	Райксева Р.Н.
Взвешенные вешества	РД 52.04.186-89	03-284-23	0,161±0,040	0,5		

ГН «ПДК загрязняющих вешеств в атмосферном воздухе населенных мест». Постановление Правительства КР № 201 (прил.№ 17) от 11 апреля 2016г. Неопределенность измерений: Неопределенность измерений, возникающая в результате отбора проб, включена в расширенную

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

Заключение*: По результатам проведенных испытаний атмосферного воздуха превышений предельно-допустимой концентрации (ПДК) максимально разовый, не обнаружено.

*- Вне аккредитации

Протокол оформил: Главный специалист ОАМКОП Протокоз испытаний касается только образуов, подвергнутых испытанием Исполнитель не несет ответственности, если проба отобрана самим заказчиком Перенечатка протокоза без разрещения испытательной каборатории запрещена. Конси протокола.



Илиясов У.О.

Стр. 4 из 4

Appendix 6. Air quality analysis outcomes in November 2023

-



Аттестат аккредитации №КG417/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

№ 545-549

1. Наименование предприятия, организации (заявитель):

Нарынская область, Жумгальский район, КОО "Китайская железнодорожная инженерная групповая компания №5".

2. Регистрационный номер и место отбора проб:

<u>545 – Новая база км 106+300;</u> <u>546 – с. Жумгал, возле школы;</u> <u>547 – с. Куйручук, возле магазина Азамат;</u> <u>548 – с. Тугол-Сай, возле магазина Кутман;</u> <u>549 – с. Тугол-Сай, АБЗ и Д</u>СУ.

\odot

3. Дата и время отбора проб:

23.11.2023г. с 11 часов 00 мин.

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: 24.11. - 27.11.2023г.
- 6. Результаты испытаний:

Стр. 1 из 4

а			анализа по точкам, Mr/M ³	Makc. pas., MI/M ³	провел	Испытания проверил
ала		03-547-23	0,007=0,001	0,5		
Оксид углерода СТП ДЭМ (СТП ДЭМ (Вавилисти В 7 52 04 10		03-547-23	0,084=0,015	0,085		
	03-02-2021,	1, 03- 54 7-23	0,910,18	5,0	Жолдошбекова 3.Ж.	Садыкбеков Т.А.
вещества	6-89	03-547-23	0,166±0,042	0,5		

определяемого показателя	НД На мегод испытаний	Код пробы	Данные апализа по точкам, мг/м ³	II,ДК Makc. pa3., Mr/m ³	Испытания провел	Испытания проверил
Диоксид серы	РД 52.04.186-89	03-548-23	0,016±0,002	0,5		
Дноксид азота	РД 52.04.186-89	03-548-23	0,118±0,021	0,085		
Оксид углерода	СТП ДЭМ 03-01-2021, СТП ДЭМ 03-02-2021	03-548-23	0,8±0,16	5,0	Жолдошбекова 3.Ж.	Садыкбеков Т.А.
Взвешенные вещества	РД 52.04.186-89	03-548-23	0,250±0,063	0,5		

Стр. 3 из 4

INTERNAL. This information is accessible to ADB Management and staff. It may be shared outside ADB with appropriate permission.

Appendix 7. Permits for the new base and the Crusher at km 106+300

КЫРГЫЗ РЕСПУБЛИКАСЫНЫН Жаратылыни ресурстары, Экология жана техникалык козөмөл министрлигинин

ЫСЫК-КӨЛ-НАРЫН РЕГИОНАЛДЫК БАШКАРМАЛЫГЫ 722900 Парып шаары, Ленин к.58/10, Фак003522) 5-04-47, тел 5-19-35 Едай: ntuoos@inbox.ru МИНИСТЕРСТВА ПРИРОДНЫ: РЕСУРСОВ, ЭКОЛОГИИ И ТЕХНИЧЕСКОГО НАДЗОРА КЫРГЫЗСКОЙ РЕСПУЕЛИКИ

ИССЫК-КУЛЬ-НАРЫНСКОЕ РЕГИОНАЛЬНОЕ УПРАВЛЕНИЕ 722900 г. Парын, ул.Лемина 55/1 Факс(03522) 5-04-47, тел 5-19-35 Emailmitucos@nbox.ru

manadosiganosard

а<u>л</u> 2023 ж

No 01-1/_____

Нарып шаары

КОО Кытай темэр жол Инженердик №5 компаниясынын жетекчиси Чжан Ляпьта

Ысык-Көл-Нарын регионалдык башкармалыгы Скодердик 25.04.2023-жылдагы МаСК5-N-0102 катындагы төмешкүчө жоон беребиз. Кочкор районунун "Карарт тучастокунда жайгынкан 1.924 ге жер аянтына лагерь жана1.57га жерге таш майгылсону глайман (ДСУ) ортнокун аштетүүгө макулдук беребиз.

Кыргыз Республикасынын 1999-жылдын 16-июпундагы №53 мыйзамы "Айлана-сэйрөнү коргоо" жөнүндө жана Кыргыз Республикасынын 2009-жылдын 8майындагы № 151 "Экологсядык коонсуздукту кимсыз кылуу боюнча жалты техникалык рогламентинки" 13,15-беренелеринки, Жер казыласы жөнүндө мыйзамынын 20,29,35- беренелеринс ылайык иш жүргүзүүнөрдү билдиребиз.

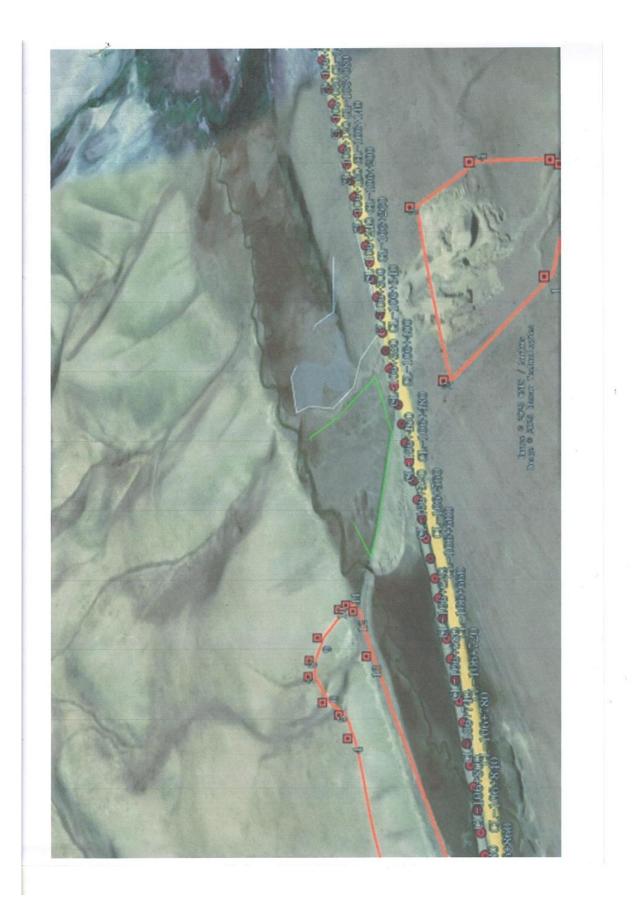
Башчынын орун басары:

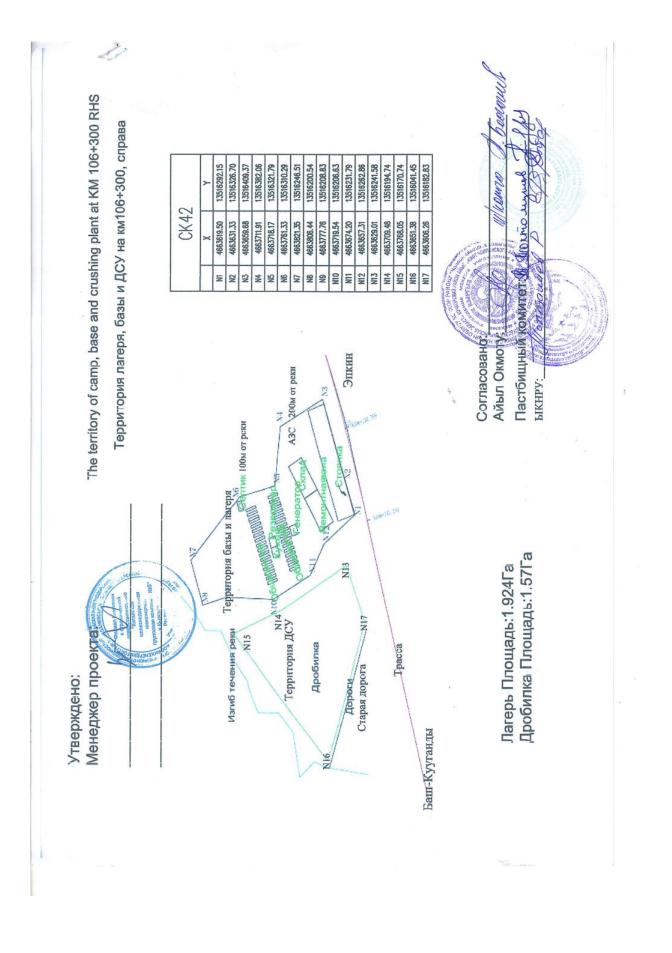
Р. Токталиев.

Ат «Аказалася Т Теп: 0(3522)5-19-35

180	. ДОКУМЕНТ ЭЛЕКТРОНДУК САНАРИ
127	КОЛТАМГАСЫ МЕНЕР БЕКИТИЛГЕН

¹ - จั_{501 15}9 กา-14453 - 28 กั4 2023 -





INTERNAL. This information is accessible to ADB Management and staff. It may be shared outside ADB with appropriate permission.

106

AK9. 27 aupene 2023 HI

Бил Теменде кол койнот аку чугуучулор весенка кол - Нарени решопалден башкарыалонини экспартила бекуличици башка адиси Т. Акилалии экспан челигрясол инжениердик кененании весенит качан челигрясол инжениердик кененании весенит качан челигрясол инжениердик кененании весенит качан челигрясол инжениердик кененании весениет N 5 ишканавесинан инжениердик кенена ако болут жеер чил кессин акиского боголга ако болут жеер чил кессин акиску со до ток зооком жакиечеслун рекская рукций лоо до Ток зооком жакиеремениен об чаравние кесслуун желона (ДСУ) но 15 и аралеской бага куручна жели (ДСУ) но 15 и аралеской каза куручна желена (ДСУ) но 15 и аралеской синетунун шакулдук берилоси кача бар эксперит акисклалает. кача бар эксперита акисклалает. Курулуучу авчередин авичн - 1, дач на жерди 1930 г. Эребиликании (ДСУ) авичн - 1, бач на жерди 1930 г. Эребиликании (ДСУ) авичн - 1, бач на жерди 1930 г. Саната сашар бери жевитанах. еуддан 100 шар бери жевитанах. еуддан 100 шар бери жевитанан исашаан кет учурда бачасшая. когдей белуп турач. Кора кенстулар

Arcuminf, T. Structanceb Martin H. Kypgunch.

Appendix 8. Permits for a bitumen pit

КЫРГЫЗ РЕСПУБЛИКАСЫНЫ	I
жаратылыш ресурстары	,
экология жана техникал	JIC
көзөмөл министрлигини	

ысык-көл-нарын регионалдык башкармалыгы 722900 Нарын шаары, Ленин к.58/10 Факс(03522),5-04-47, тел 5-19-35 Email: *терооs@inbox.ru*

МИНИСТЕРСТВА ПРИРОДНЫХ РЕСУРСОВ, ЭКОЛОГИИ И ТЕХНИЧЕСКОГО НАДЗОРА КЫРГЫЗСКОЙ РЕСПУБЛИКИ

ИССЫК-КУЛЬ-НАРЫНСКОЕ РЕГИОНАЛЬНОЕ УПРАВЛЕНИЕ 722900 г. Нарын, ул.Ленина 58/10 Факс(03522) 5-04-47, тел 5-19-35 Email:ntuoos@inbox.ru

х_____»_____2022 ж

Nº 01-1/_____

Нарын шаары

КОО "Китайская железнодорожная инженерная груповая компанияга №5"

Нарын регионалдык башкармалыгы Сиздердин 16-ноябрь 2022-жылдагы №СК-N-0066 сандуу кайрылуу катыныздарга,

Түндүк-Түштүк авто жолунун Эпкин-Баш-Кууганды авто жолунун реконструкциялоо ишке ашырууга Куйручук айыл өкмөтүнөн убактылуу мөөнөткө АБЗ жана ДСУ курууга жер бөлүнүп берилген.

Орнотулган АБЗнын күн чыгыш жагына битум сактаганга бетондолгон яма курууга өндүрүштүк кызыкчылыгынарга байланыштуу иш алып барабериниздерди билдирет.

Башчынын орун басары:

Д.Оморов

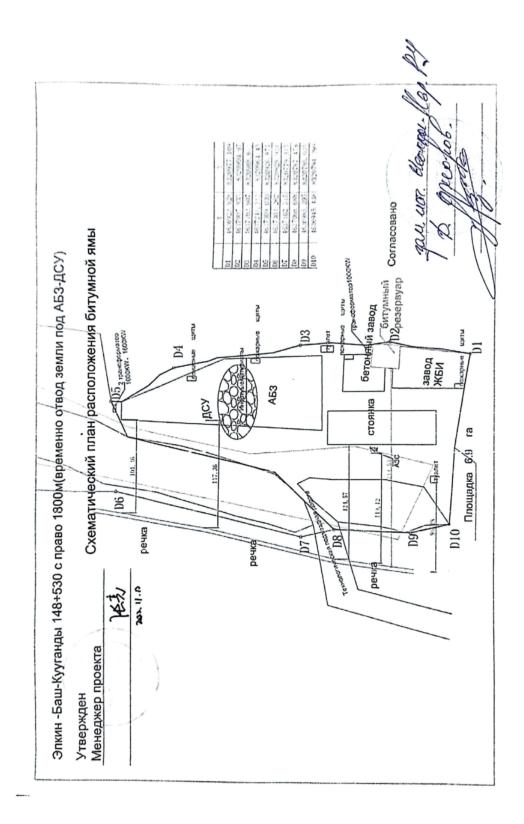
Атк: Л. Турусбекова Тел: 0(3522)5-19-35

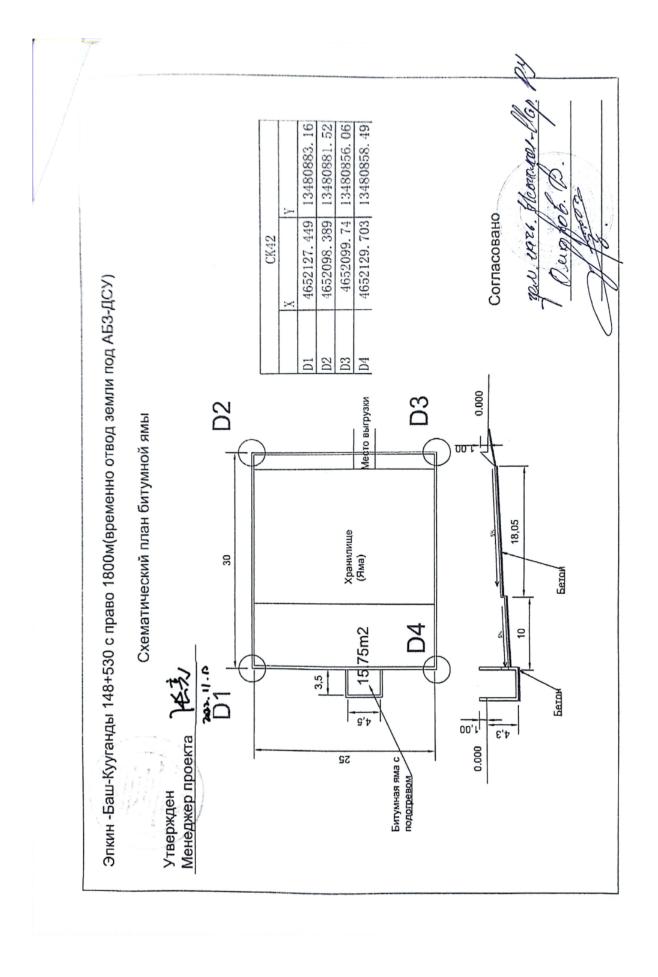
:

a4 4144 0C

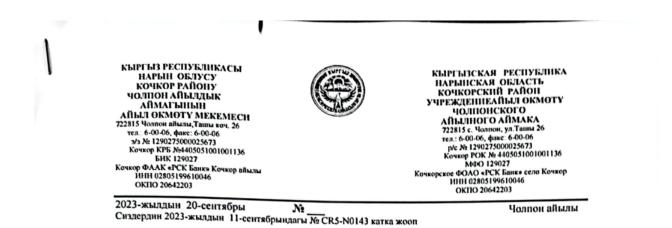
ДОКУМЕНТ ПОДПИСАН ЭЛЕКТРОННОЙ ЦИФРОВОЙ ПОДПИСЬЮ

JK Lv VI oy mR 6I Kj hI JZ SW HB Np zq jT To h O1 lk rJ BX VM gJ ZX al MD MH EO CO 8Q aZ (Владелец: Оморов Дамир-Ибраевич





Appendix 9. Permits for the quarry received in the reporting period



№5 Темир-жол инженердик топ компаниясы, Кытай КОО

КЫЗМАТТЫК КАТ

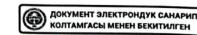
Эпкин-Башкууганды авто жолун оңдоп-түзөө долбоорун ишке ашыруу максатында км. 106+420 карьердин аянтын 0,62 га жана км. 110+900 карьердин аянтын 1,5 га. кеңейтүүгө макулдук экендигибизди билдирем.

Башчы

Э. Макишов

Жаныш уулу О., турак-жай, коммуналдык жана агрардык маселелери боюнча башкы адис.

Тел:0700-61-00-16



Кол койгон: Макишов Э.О., 20.09.2023

Сканировано с CamScanne

Чыг. № 02-1-34/1495, 20.09.2023

КЫРГЫЗ РЕСПУБЛИКАСЫНЫН ЖАРАТЫЛЫШ РЕСУРСТАРЫ, ЭКОЛОГИЯ ЖАНА ТЕХНИКАЛЫК КӨЗӨМӨЛ МИНИСТРЛИГИ НАРЫН РЕГИОНАЛДЫК БАШКАРМАЛЫГЫ 722900.Нарын шаары Ленин 58/а Факс(03522 5-04-47),тел 5-19-35 Еmail: ntuoos@inbox. ЖИН 02501201410056 ОКПО 25933715	МИНИСТЕРСТВО ПРИРОДНЫХ РЕСУРСОВ, ЭКОЛОГИИ И ТЕХНИЧЕСКОГО НАДЗОРА КЫРГЫЗСКОЙ РЕСПУБЛИКИ НАРЫНСКОЕ РЕГИОНАЛЬНОЕ УПРАВЛЕНИЕ 722900 г. Нарын. ул.Ленин 58/а Email:ntuoos@inbox.ru ИПИ 02501201410056 ОКПО 25933715
«»2023-ж.	Нарын ш.

КОО «№5 Кытай темир жол инженердик топтук компаниясы» ишканасына

Р.Токталиев

Кыргыз Республикасынын жаратылыш ресурстары ,экология жана регионалдык Нарын министрлигинин техникалык көзөмөл башкармалыгы, Сиздердин 2023-ж. 22-сентябрындагы №CR5-N-0148 Түндүк-Түштүк альтернативалык кайрылуунуздарга, сандуу автожолунун курулуш долбоорунун алкагында Эпкин-Башкууганды автожолун реконструкциялоо долборун ишке ашырууда ,Эпкин — Башкууганды автожолунун 106-420км.(оң тарабындагы карьердин аянтын 0,62га) жана 110-900(оң тарабындагы карьредин аянтын 1,5 га) чакырымындагы карьерлердин аянтын кеңейтип пайдаланууга макулдугун берет.

Карьерлерди иштетүүдө Кыргыз Республикасынын «Кыргыз Республикасында экологиялык коопсуздукту камыз кылуу боюнча жалпы техникалык регламент » жонүндөгү мыйзамынын талаптары сакталуусун маалымдайбыз.

Башкармалыктын башчысы

Н.Миназарова0701458458

ф документ электрондук санарип колтамгасы менен бекитилген

Upr. Nº 01-1/1018, 26.09.2023

Кол койгон: Токталиев Р.А., 26.09.2023

112

