

# Environmental Monitoring Report

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Project Number: 48424-002  
January 2020

## KAZ: CAREC Corridors 1 and 6 Connector Road (Aktobe–Makat) Reconstruction Project

Prepared by the Dongsung Engineering Co., Ltd in association with subconsultant Zhol-Sapa LLP for the Ministry of Investments and Development, Republic of Kazakhstan and the Asian Development Bank.

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# Semi-annual environmental monitoring report

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Project number: No.3416-KAZ  
Reporting period: July-December 2019

REPUBLIC OF KAZAKHSTAN: CAREC Corridors 1 & 6 Connector Road (Aktobe - Makat)  
Reconstruction Project (section km 330-504)

Funded by the ASIAN DEVELOPMENT BANK

Prepared by the Dongsung Engineering Co., Ltd in association with subconsultant Zhol-Sapa LLP for the Ministry of industry and infrastructural development of the Republic of Kazakhstan and the Asian Development Bank.

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### ABBREVIATIONS

a/c	asphalt concrete
ADB	Asian Development Bank
c/g	coarse-grained material
CAREC	Central Asian Regional Economic Cooperation
CFR	Committee for Roads
CSC	Construction Supervision Consultant
CSSGM	Crushed Stone-Sand-Gravel Mix
ECP	Environmental Control Plan
EMP	Environmental Management Plan
EP	Environmental Protection
FLM	Fuel and lubricant materials
HIDV/AIDS	Human Immuno-Deficiency Virus / Acquired Immune Deficiency Syndrome
HS	Health and Safety
HSP	Health and Safety Plan
IE	Individual Entrepreneur
IEM	Industrial Environmental Monitoring
LLP	Limited Liability Partnership
MID	Ministry of Investments and Development
MIID	Ministry of Industry and Infrastructural Development
MPC	Maximum Permissible Concentration
MPL	Maximum Permissible Level
PMC	Project Management Consultant
PSE	Public State Enterprise
QAJ	“National Company “QazAvtoJol” JSC
RF	Russian Federation
RK	Republic of Kazakhstan
SAEMR	Semi-annual Environmental Monitoring Report
SGM	Sand-Gravel Mix
SI	State Institution
SMA	Crushed Stone and Mastic Asphalt
SPZ	Sanitary Protection Zone
SS	State Standard
SSEMP	Site Specific Environmental Management Plan
STI/STD	Sexually Transmitted Infections / Sexually Transmitted Diseases
SW	Solid Waste
TS	Traffic Safety

## **1 INTRODUCTION**

### **1.1 Preamble**

1. This report is a semi-annual review on environmental monitoring of the CAREC Corridors 1 & 6 Connector Road (Aktobe - Makat) Reconstruction Project (road section km 330-504, Lots 4-7). The report is the fourth semi-annual for this project.

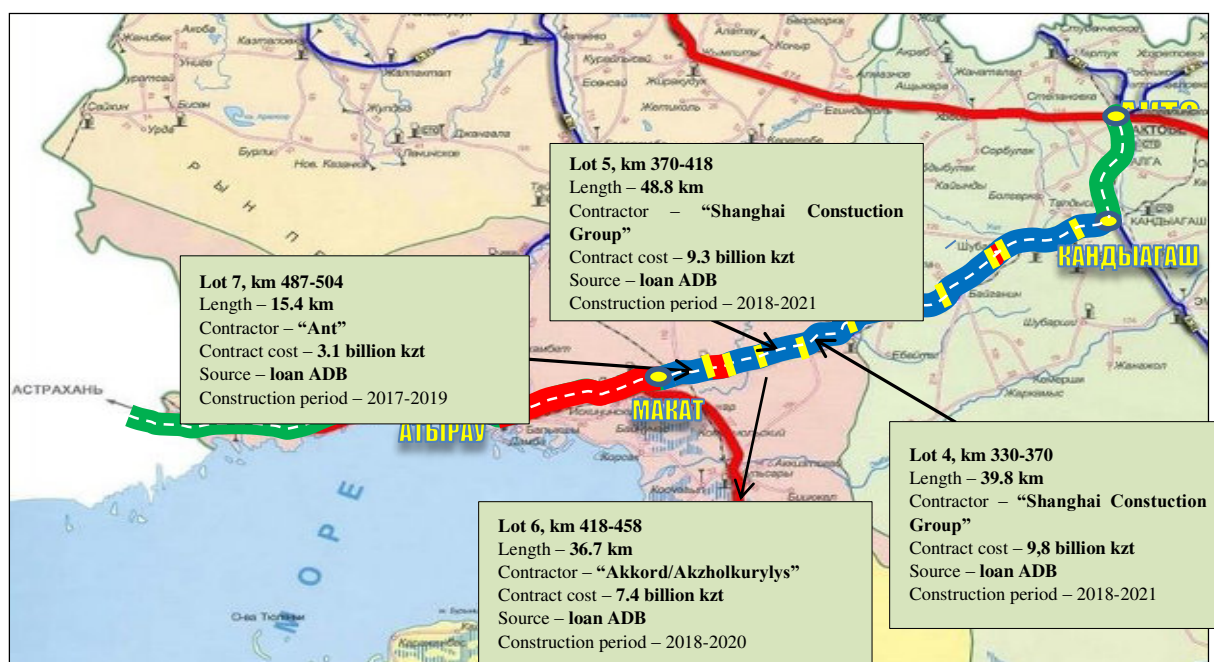
### **1.2 Key information**

2. In July 2018, three Contracts were awarded through re-tender process to Shanghai Construction Group (hereinafter "SCG") and <Akkord and Ak Zhol Kurylys> Joint Venture (hereinafter "AA"). Contracts Lot-4 and Lot-5 were awarded to the SCG and Lot-6 to AA. These new Contractors have started works of mobilization and preparation on the site since August 2018.
3. The Contractor "Shanghai Construction Group Co." which is the Contractor of Lot 4 Contract 004-ADB/CW-2018 and Lot 5 Contract 005-ADB/CW-2018 received advance payments in July 2018. The Contractor acquired "Shanghai Construction Group Co." Branch Office Registration certificate on 30.10.2018. Also, the Contractor received license for road construction of relevant category on 24.12.2018. The Engineer officially issued "Notice to Commence Works" on 08.01.2019.
4. The Contractor "Akkord - Ak zhol kurylys" of Lot 6 Contract 006-ADB/CW-2018 received an advance payment on 27.07.2018. The Contractor received a permission (talon) for the construction and installation works from the Department of State Architectural and Construction Control. "Order to Proceed" have been acquired from Employer and approved by Traffic Police. The Engineer officially issued "Notice to Commence Works" on 01.10.2018. Land preparation for base camp construction has been completed on 3 Hectare at km 435 of reconstructed road, near Zhamansor village on 25.03.2019. Territory was fenced, during the reporting period installation and construction of facilities, offices and accommodations for the Contractor's personnel and workers is on progress.
5. On Lot 5 during the reporting period, the issue is considered to change material for Additional Base Layer of soil consolidated by cement (soil – 80%, SGM – 16%, stabilizing additive – 0,002%), H-20 cm to alternative variant of sub-base of SGM (sand gravel mix), H-20 cm.

## 2 PROJECT DESCRIPTION AND CURRENT ACTIVITIES

### 2.1 Project Description

6. "Aktobe - Atyrau - Border of the Russian Federation to Astrakhan" Road is a republic importance road. The project section is a road section, connecting the northern and western regions of Kazakhstan with each other, with access to the Russian Federation, which requires increased requirements for transport and operational characteristics of the road.



Picture 1. Location of the project road

7. The project road category is II, according to the traffic intensity. Road construction is carried out on 4 Contracts, as indicated below.
8. **Lot 4: km 330 – km 370 (Sagiz village):** This section includes the reconstruction of the road from category III to category II with a total length of 40 km. Other parts of this section, the direction of traffic flow coincide with the existing coverage with partial slopes from the embankment in the area of rectification and curve. On this site, the project provides for the construction of 2 bridges and 1 overpass. Overpass on km 336+900, the length is 42.2 meters. The bridge across the river Nogaity on km 338+900 has the length of 66,15 meters. The bridge across the Sagiz river at km 342+300 has the length of 105,3 meters. This site provides the construction of culverts in the number of 14 pieces of different diameters, cattle passes (6 pieces), and rest area (2 pieces).
9. **Lot 5: km 370 – km 418 (v. Mukur - v. Zhanterek):** This section includes the reconstruction of the road from category III to category II with a total length of 48.2 km. Other parts of this section, the direction of traffic flow coincide with the existing cover with partial slopes from the embankment in the area of rectification and curve. On this site, the project provides for the construction of 1 bridge. The bridge across the river Mukur at km 379 +100 has the length of 48.55 meters. Also on this site construction of culverts in the number of 12 pieces of different diameters, cattle passes (8 pieces), rest area (2 pieces) are provided.
10. **Lot 6: km 418 – km 458 (v. Zhamansor):** This section includes the reconstruction of the road from category III to category II with a total length of 36.73 km. Other parts of this

section, the direction of traffic flow coincide with the existing coverage with partial slopes from the embankment in the area of rectification and curve. On this site, the project provides for the construction of 1 bridge. The bridge across the Sagiz river at km 429+000 has the length of 84,25 meters. The project also provides the construction of culverts in the number of 12 units of different diameters, 1 cattle pass and 2 rest areas.

11. **Lot 7: km 487 – km 504 (v. Dossor):** length of this road section is 15,392 km, type II, 2 lanes. This section includes the reconstruction of the road from category III to category II. Other parts of the site, the direction of traffic flow coincide with the existing coverage with partial slopes from the embankment in the area of rectification and curve. This section provides the construction of culverts in the number of 12 pieces of different diameters, cattle passes (2 pieces).

Additional work quantities are expected to be added to the main contract. Now design and estimate documentation is under consideration by the State Expertise of projects. The approximate date of receiving the state expertise conclusion is March-April 2020.

## 2.2 Agreements (Contracts) for project implementation and management

12. CFR MID RK signed the contract with "NC "QazAvtoJol" JSC (QAJ) for the project management consulting services in accordance with requirement specifications acceptable for ADB and applicable under the legislation of the Republic of Kazakhstan. QAJ is fully staffed during the Project implementation. The responsible specialist for environmental and social safeguard measures conducts site audits and inspections, cooperates with CSC safeguard specialist in order to effectively manage the project in part of environmental plans implementation.
13. By decree of President of the Republic of Kazakhstan dated 26.12.2018 No. 806 "On measures on further improvement of state administration system of the Republic of Kazakhstan", in order to improve the efficiency of state administration system, the Ministry of Investment and Development of the Republic of Kazakhstan was reorganized by transforming it into the Ministry of Industry and Infrastructural Development of the Republic of Kazakhstan with handing over functions and powers: to National Economy Ministry of the Republic of Kazakhstan in the sphere of state policy formation on investment attraction and the Ministry of Foreign Affairs of the Republic of Kazakhstan in the sphere of state policy implementation on investment attraction.
14. The regional representative of the Employer is "NC "QazAvtoJol" JSC Atyrau branch. A list of main organizations included in the project and related to environmental protection measures (Environmental Safeguards), is given in Table No.1 below. Contractors' Contract Information is shown in Table 2. Organizational chart of the project coordination is described in Picture 2.

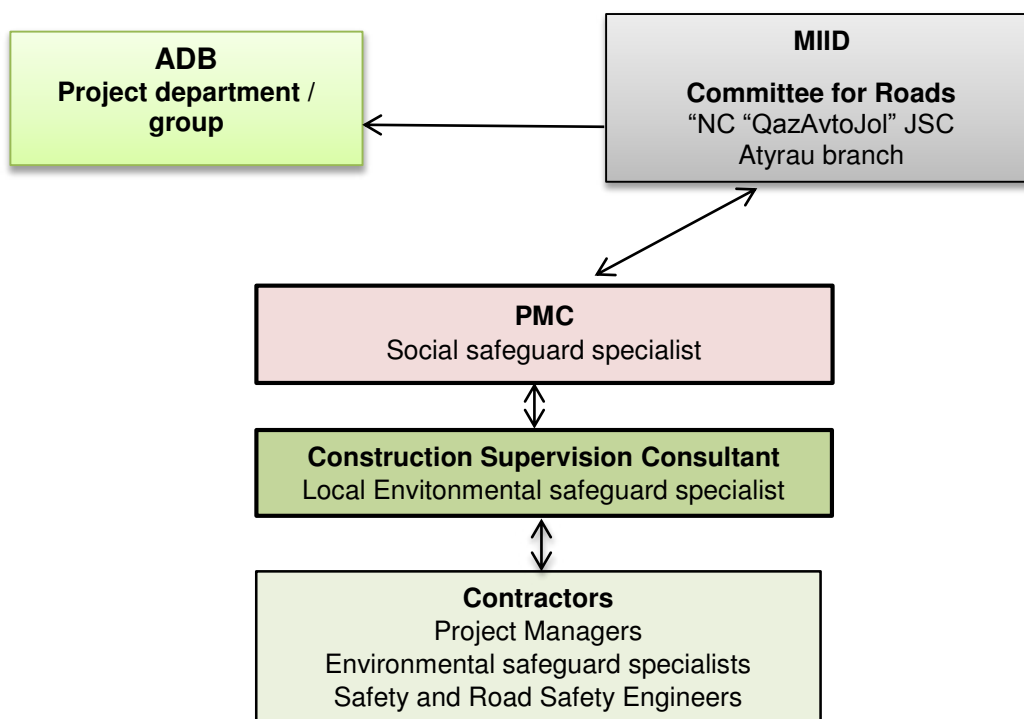
**Table 1. Organization list and specialists' contact information, related to Environmental safeguards of the Project**

Organization name	Representative	Contact information
ADB Project department / group	Nurlan Djenchurayev	
ADB Office in the RK	National Consultant	

Committee for Roads	Ruslan Kussainov	Astana city 010000 / Transport Tower Kabanbay Batyr street 32/1 8 778 668 70 06 r.kusainov@mid.gov.kz
"NC "QazAvtoJol" JSC Atyrau branch	Kerimkulov Serik Branch Director	atyrau.info@kazautozhol.kz
PMC "NC "QazAvtoJol" JSC	Zeinullina Aliya Social and environmental safeguard specialist	+ 7 701 982 66 57 a.zeinullina@kazautozhol.kz
Construction Supervision Consultant DONGSUNG ENGINEERING CO. LTD/ "ZS ENGINEERING " LLP	Novossadova Natalya Environmental safeguard specialist	+7 702 268 98 08 <a href="mailto:atyrau_kns2@mail.ru">atyrau_kns2@mail.ru</a>
"Shanghai Construction Group Co." Lot 4	Satvaldiyev A. Environmental specialist	+7 778 045 0714
"Shanghai Construction Group Co." Lot 5	Gulzhanat Zhantokova Environmental specialist	+7 777 298 88 44
Lot 6 "Akkord / Ak zhol kurylys" Joint Venture		
Lot 7 "Ant Insaat Maden Sanayi A.S."		

**Table 2. Contractors' Contract Information**

Contractor	Contract No.	Site length (km)	Contract signing date	Project commencement and completion date
Lot 4 "Shanghai Construction Group Co." (China)	004-ADB/CW- 2018	39.80	20.07.2018	08.01.2019 07.03.2021
Lot 5 "Shanghai Construction Group Co." (China)	005-ADB/CW- 2018	48.21	20.07.2018	08.01.2019 05.06.2021
Lot 6 JV "Akkord / Ak zhol kurylys" (Azerbaijan/ Kazakhstan)	006-ADB/CW- 2018	36.74	10.07.2018	01.10.2018 28.11.2020
Lot 7 "Ant Insaat Maden Sanayi A.S." (Turkey)	007-ADB/CW- 2017	15,392	16.08.2017	20.12.2017 12.06.2019
Total project length:		140,14		



Picture 2. Organization chart of the project coordination

### 2.3 Project Activities during the Current Reporting Period (July – December 2019)

15. **Lot 4.** The Contractor «Shanghai Construction Group Co.» has been in serious progress delay, particularly in works of preparation and site mobilization, which were most important in the aspect of facilitating and activating major construction activities scheduled in his programme due to crucial reasons:

- the Contractor failed to make good plans and consequent detail time programme.
- the Contractor failed to provide construction resources such as specialist engineers, construction equipment, equipment operators, skilled workers and major construction materials.
- the Contractor engaged specialist subcontractors: "SHAM" LLP and "Kazkomservice" LLP.

16. For Lot 4 the Engineer issued a "Notice to Commence Works" on 08.01.2019. During the reporting period the following work activities have been carried out:

- Topsoil removal of bypass road between km 330-336, km 337-370, totally 39 km done.
- Bypass road construction between km 330-336, 340-370 km, totally 39 km done.
- Milling and scarifying of the existing pavement and base layers of existing road, totally 39 km done.
- Topsoil removal tottally 39 km done.
- Roadbed construction. The quantity is 520 thousand m3.
- Culvert construction works are on progress.

**Table 3. Number of employees on Lot 4 site by the Contract No.004-ADB/CW-2018**

<b>Total number of employees</b>	<b>as of 31.10.2019</b>			<b>as of 31.12.2019</b>		
	<b>254</b>			<b>42</b>		
Foreign personnel	19			11		
Total number of employees from other regions of Kazakhstan	96			31		
Total number of employees from Atyrau region	139					
Total number of employees from Atyrau region, Kyzylkoga district, Sagiz village	74					
Total number of men	191					
Total number of women	21	Service personnel	Technical Office Staff		Service personnel	Technical Office Staff
		12	9			

17. The construction work progress on Lot 4 is presented in Table 4 below.

**Table 4. The construction work progress status on Lot 4 for the reporting period (July – December 2019)**

<b>Contractor's name and site</b>	<b>Work activity</b>	<b>Unit</b>	<b>Totally by the Contract</b>	<b>Completed in 2018</b>	<b>Completed for the II semi-annual 2019</b>	<b>% progress</b>	<b>Balance</b>
Shanghai Construction Group Co.Ltd (section km 330-370) Lot 4 (Sagiz village)	Cost	KZT	8 828 754 266.70	-	1 370 490 670.67	34,5%	7 458 263 596.03
	Binder Coarse	km	40	-	-	0	40
	Upper Base Coarse	km	40	-	3,3	8,3	36,7
	Lower Base Coarse	km	40	-	9,5	23,8	30,5
	Sub-base	km	40	-	14,8	37	25,5
	Roadbed	thou. m <sup>3</sup>	1,201	-	520,4	43,3	680,6
	Culvert	nos	20	-	8	40	12
<b>Total work progress</b>		<b>%</b>	<b>100</b>	<b>-</b>		<b>15,5</b>	<b>84,5%</b>



**Lot 4: Roadbed construction**



**Lot 4: Culvert installation**

18. **Lot 5:** As this Contract has been under management of same Contractor on Lot 4, preparation works progress has been similar to the case of Lot-4 during initial months. However, differently from Lot-4, Contractor engaged a Subcontractor of local base in January 2019. Majority of preparation works including site mobilization has been entrusted to this Subcontractor. Comparing to the main Contractor, this Subcontractor has been able to mobilize construction resources faster by utilizing the advantage of local base in the region. The Subcontractor has performed work activities with higher productivity while the main Contractor has delivered almost no product on the site. By this way, the Contractor Lot 5 with engagement of constructional resources provided by the Subcontractor has been able to achieve considerable progress.
19. By June 30 base camp construction of Lot 5 has been completed. As of 31.12.2019, there are necessary and sufficient places in base camp to accommodate workers. The Subcontractor has made effort to provide comfortable condition in the Engineer's office and accommodations. At the moment "Ak zhol kurylys" LLP pays for transport and house rentals for the Engineer for December. On January 9 environmental specialist Muszhanova A. has mobilized on Lot 5 and took the situation under control. Asphalt Plant is being mobilized. Railway dead-end has completed for 85%.
20. For Lot 5 the Engineer issued a "Notice to Commence Works" on 08.01.2019. During the reporting period the following work activities and quantities have been carried out: topsoil removal at bypass road from km 370 to 418,2 (48,2 km) and filling CSSM for bypass road from km 370 to 418,2 (48,2 km). At the main road have been done roadbed construction for 14 km and existing pavement removal for 39 km (from PK0+00 to PK390+00).

**Table 5. Number of employees on Lot 5 site by the Contract No.005-ADB/CW-2018**

<b>Total number of employees</b>	<b>as of 31.10.2019</b>	<b>as of 31.12.2019</b>
	<b>161</b>	<b>13</b>
Foreign personnel	0	0
Total number of employees from other regions of Kazakhstan	89	5
Total number of employees from Atyrau region	72	1

Total number of employees from Atyrau region, Kyzylkoga district, Mukur village	15			1		
Total number of men	151			12		
Total number of women	10	Service personnel	Technical Office Staff	1	Service personnel	Technical Office Staff
		7	3		0	1

21. The construction work progress on Lot 5 is presented in Table 6 below.

**Table 6. The construction work progress status on Lot 5 for the reporting period (July – December 2019)**

Contractor's name and site	Work activity	Unit	Totally by the Contract	Completed in 2018	Completed for the II semi-annual 2019	% progress	Balance
Shanghai Construction Group Co.Ltd (section km 370-418) Lot 5	Cost	KZT	8 446 782 180.62	-	1 289 270 54 0.26		7 157 511 640.36
	Binder Coarse	km	48,2	-	0	0	48,2
	Upper Base Coarse	km	48,2	-	0	0	48,2
	Lower Base Coarse	km	48,2	-	4,7	9,8	43,5
	Sub-base	km	48,2	-	11,2	23,2	37
	Roadbed	thou. m <sup>3</sup>	1,132	-	745,5	65,9	386,5
	Culvert	nos	20	-	1	5	19
<b>Total work progress</b>		<b>%</b>	<b>100</b>	<b>-</b>	<b>-</b>	<b>15,3</b>	<b>84,7%</b>



**Lot 5: Construction of lower base course of CSSM**



**Lot 5: Excavation**

22. The status of borrow pit works is given in Table 7 below.

**Table 7. Lot 5 borrow pit information as of 31.12.2019**

Name	KM/PK	Location	Reserve			Status
			Depth m	Thous. m <sup>3</sup>	m <sup>3</sup>	
Project borrow pit No.3	407++30/375+25	To the right from road axis 305m	3,0	986,9	986900	1 horizon 3.0 m
Project borrow pit No.4	367+400/369+04	To the right from road axis 300m	3,0	300	300000	1 horizon 3.0 m
Borrow pit No.23	381+00/86+00	To the right from road axis 300m				withdrew
Borrow pit No.7	382+00/98+00	To the right from road axis 400m			141530	proposed
Borrow pit No.8	386+00/138+00	To the right from road axis 400m				proposed
Borrow pit No.10	397+00/246+00	To the right from road axis 9000m			136260	proposed
Borrow pit No.11	405+00/330+00	To the right from road axis 1870m			126213	proposed
Borrow pit No.12	406+00/335+00	To the right from road axis 1800m	1,6		108200	proposed
Borrow pit No.13	406+00/335+00	To the right from road axis 1800m			134196	proposed

23. **Lot 6.** All Base Camp facilities built so far in Zhamansour have been fully occupied by workers and engineers of the Contractor and the Supervision Consultant Engineer and all facilities have been operational in full scale since 01.03.2019. The laboratory area is 120 m<sup>2</sup>. Certificate on evaluation of measurement state in the laboratory No. TL-ESM 19/05 dated 15.05.2019. All laboratory equipment is with factory calibration and new. It operates since 15.05.2019. Staffed for 100%.

**Table 8. Number of employees on Lot 6 site by the Contract No.006-ADB/CW-2018**

<b>Total number of employees</b>	<b>as of 01.11.2019</b>			<b>as of 31.12.2019</b>		
	<b>180</b>			<b>110</b>		
Foreign personnel	0			2		
Total number of employees from other regions of Kazakhstan	78			32		
Total number of employees from Atyrau region	40			12		
Total number of employees from Atyrau region, Makat district, Zhamansor village	24			6		
Total number of men	142			100		
Total number of women	15	Service personnel	Technical Office Staff	10	Service personnel	Technical Office Staff
		10	5		9	1

Major issue of concern at present is the Permit to extract soil materials from the Borrow Pits. And such Permit has been waited for long time.

For Lot 6 the Engineer issued a "Notice to Commence Works" on 01.10.2018. During the reporting period the following work activities and quantities have been carried out: Roadbed filling at the mail road – 24500m (PK0+00 to PK245+00), Final finishing of the roadbed – 17240m (PK0+00 to PK158+00, PK190+60 to PK205+00), Sub-base of SGM – 15800m (PK0+00 to PK 158+00), Lower base course of CSSM – 15000m (PK0+00 to PK150+00), Upper base course of CSSCM – 5060m (PK0+00 to PK50+60), Binder course of c/g – 5000m (PK0+00 to PK5+00).

At PK28+78 has been installed precast concrete pipe d–1.5m under the main road.

At PK42+75 has been installed precast concrete pipe d–1.5m under the main road.

At PK62+03 has been installed precast concrete pipe d–2,5-2,0m under the main road.

At PK90+78 has been installed precast concrete pipe d–1.0m under the main road.

At PK122+71 has been installed precast concrete pipe d–1.5m under the main road.

At PK212+24 has been installed precast concrete pipe d–1.0m under the main road.

At PK252+60,50 has been installed precast concrete pipe d–1.5m under the main road.

At PK173+70 has been installed precast concrete pipe d–4x2,5m under the main road.

At PK163+81 has been installed precast concrete pipe d-1,5m under the main road.

Gas pipeline reconstruction at PK36+63, PK68+15, PK118+13, PK178+47, PK190+33, PK247+20.

Reconstruction of communication line VOLS TUSM-13 at PK148+64.

24. The construction work progress on Lot 6 is presented in Table 6 below. Lot 6 borrow pit information is given in Table 9 below.

**Table 9. The construction work progress status on Lot 6  
 for the reporting period (July – December 2019)**

Contractor's name and site	Work activity	Unit	Totally by the Contract	Completed in the I semi-annual 2019	Completed for the II semi-annual 2019	% progress	Balance
Akkord / Akzhol kurylys Lot 6	Cost	KZT	6 669 640 276.85	934 391 23 7.47	1 680 597 6 96.63		4 989 0 42 580, 22
	Binder Coarse	km	36,7		5,0	14	31,7
	Upper Base Coarse	km	36,7		5,1	14	31,6
	Lower Base Coarse	km	36,7		15,0	41	21,7
	Sub-base	km	36,7		15,8	43	20,9
	Roadbed	thou. m <sup>3</sup>	854	253,6	436,4	49	417,6
	Culvert	nos	13	3	8	61,5	5
<b>Total work progress</b>		<b>%</b>	<b>100</b>			<b>25,2</b>	<b>74,8%</b>



***Lot 6: Final finishing of the roadbed  
 PK70+00 – 82+00***



***Lot 6 :Concreting under pipe body B20  
 PK252+60,50***

**Table 10. Lot 6 borrow pit information as of 31.12.2019**

Name	KM/PK	Location	Depth			Extraction	Reclamation	Status
			m	Thou m3	m3			
Project borrow pit No.1	km 439+496 PK 202+78,33	to the right 439 m			1682600	1657443,93	0	horizon 1 3,0m
Project borrow pit No.2	419+010 PK 11+77,46	to the right 225 m			3916600	385498,7		horizon 1 3,0m
Borrow pit No.1	PK40+00	from the right 1.9 km			145200	85348,13		horizon 1 3,0m
Borrow pit No.2	PK 57+00	from the right 0.450 km			140500	36419,41		horizon 1 3,0m
Borrow pit No.3	PK 119+00	to the right 0.45 km			139200	60355,37		horizon 1 3,0m
Borrow pit No.4	PK 214+00	to the right 0.37 km			194600	not extracted		horizon 1 3,0m
Borrow pit No.5	PK 236+00	to the right 1.22 km			138600	not extracted		horizon 1 3,0m
Borrow pit No.6	PK 295+00	to the right 0.334 km			190600	not extracted		horizon 1 3,0m
Borrow pit No.7	PK 367+35	to the right 0.56 km			138900	not extracted		horizon 1 3,0m
Borrow pit No.8	367+35	to the right 1.05 km			164700	not extracted		horizon 1 3,0m

25. **Lot 7.** The Contractor proceeded the main work according to accepted Work program and Financial Plan, which were agreed by Engineer.
26. At the end of November and beginning of December 2018, recultivation was carried out at borrow pits No.2 and 3 in due course. The borrow pit No.1 had not been used in 2018 and 2019.
27. As far as possible, all protection measures are observed in the project area. The Contractor has constructed 2 cattle passes in correct size at PK 34+61 and PK 110+40 for animals in the specified location of the project (precast concrete 2,5x4 m).
28. Base camp is on the Asphalt Plant territory. According to the requirements of the Sanitary Rules and Regulations of the Republic of Kazakhstan, it is neat and tidy in base camp, taking into account the rights of local land users.
29. All work activities indicated in the contract have been completed and handed over to the Employer. Additional work quantities are expected to be added to the main contract. Now design and estimate documentation is under consideration by the State Expertise of projects. The approximate date of receiving the state expertise conclusion is March-April 2020.

## **2.4 Description of Any Design Changes (July-December 2019)**

30. **Lot 7 Contract:** Design Change - Upper Base Course. Original Design: Black Crushed Stone Base Course. Alternative Design: Hot Highly Porous Asphaltic Concrete Brand II. Design change from base course of black crushed stone with thickness H=10 cm to hot highly porous asphaltic concrete brand II with thickness H=10 cm was agreed by the Project Designer "Arnai".
31. **Contract Lots 4, 5 & 6** Design Change - Additional Base Layer. Original Design: 20cm thick layer of Soil, Sand Gravel Mix, Cement + Roadzyme Stabilization and immediate upper 20cm thick layer of C10 Crushed Stone Base. Alternative Design: 20cm thick layer of Sand Gravel Mix and immediate upper 25cm thick layer of C10 Crushed Stone Base.
32. With regard to the Lot-4, Lot-5 and Lot-6 Contractors' granular pavement activity "construction of additional layer of soil consolidated by cement with a stabilizing additive" of the Contract, it is noticeable that records of similar application in the past projects implemented in other places in the Republic of Kazakhstan indicated serious road pavement structural failures, and consensus has since been established through several occasions among all parties concerned with the Project implementation.
33. All Contractors of Lot-4, Lot-5 and Lot-6 have agreed that the Alternative shall be constructed with no additional time and with no additional cost to the Contract based on following decision: delete "cement and additive or Roadzyme stabilization" from the additional base layer in order to eliminate risk of future potential pavement failures, replace it with SGM (Sand Gravel Mix) in its entire thickness of 0.20m.
34. The Project Designer "KustanaiDorProject" had no objection to the above change. These changes allow to the Contractor:
- (i) to reduce time for completion,
  - (ii) to maintain the original Contract unit price of additional base layer without change,
  - (iii) to conduct trial construction and tests of the Alternative variant
  - (iv) to ensure the maintainance of the bearing capacity and elastic modulus as required by the present design and the Technical Specification
  - (v) the environmental mitigation measures provided in the EMP/SSEMP for Lots 4, 5, 6 and 7 are sufficient for the new conditions, since the layer replacement does not have a negative impact on the environment.

### **3 THE ENVIRONMENTAL ACTIVITIES**

#### **3.1 General Description of Environmental Activities (Environmental Safeguard Measures)**

35. Lot 4: For the EMP preparation the Contractor involved specialists from separate organization. The EMP was agreed by the CSC and PMC on March 4, 2019. On 14.02.2019 the Contractor submitted to the MIID RK an application on 8 borrow pits in order to include in the State Subsoil Fund Management Program. Regarding the Contractor's organizational structure on environmental protection, environmental specialist has mobilized since September 2019.
36. On October 30, 2019, the project on specific requirements of water consumption and drainage for road "Aktobe - Makat" reconstruction site km 330-370 and republic importance road "Aktobe – Atyrau – border of the RF (to Astrakhan)" was approved in the Ministry of Environment, Geology and Natural resources of the Republic of Kazakhstan, Committee for water resources for further receiving from the Republic State Institution "Zhaiyk-Caspian basin inspection on regulation of water resources consumption and protection of the Committee for water resources of the Ministry of Environment, Geology and Natural resources of the Republic of Kazakhstan", for obtaining a permit for special water use.
37. Based on the agreement for services of the environmental laboratory specialists "Econormative" LLP No.SCGK-2608 dated August 26, 2019, radioactive background has been measured on the Asphalt plant territory and storage of aggregate materials and taken a general chemical analysis of water from the rivers Sagiz, Nogayty.
38. All waste is transported and removed in the landfill of "West Dala" LLP, agreement No.377-2019 dated September 30, 2019.
39. Quarterly environmental monitoring is planned in the river under the agreement with "Econormative" LLP No.SCGK-2608 dated August 26, 2019.
40. Lot 5: based on the audit results of the ADB consultant, the Contractor made adjustments to the EMP in terms of water resources monitoring, including indicators of suspended particles and measures to prevent FLM spills. On 08.06.2019 the CSC accepted the EMP and submitted to PMC for approval. Environmental specialist has not mobilized on site. The selection of candidates is on process. Environmental specialist of Lot 6 and Lot 7 combines this position.
41. According to the environmental impact mitigation plan, agreement No.17/19 was signed on 17.01.2019 and "Econormativ" LLP agreement No.211/3/AZHK dated 04.07.2019. The technological work procedure is observed, loading and unloading of dusting materials is carried out by mechanized way, manual work with these materials is allowed as an exception when taking appropriate measures against spraying (protection from wind, losses, etc.), speed limit signs are installed, atmospheric air is monitored under an agreement with a certified laboratory.
42. Lot 6: an agreement was concluded with "Analytical laboratory for environmental protection" LLP agreement No.17/19 dated 17.01.2019 and "Econormativ" LLP agreement No.211/3/AZHK dated 04.07.2019. The project borrow pits Nos.1, 2, 3, 4 are operated during construction works, taking into account that the main reasons of air pollution are construction equipment and vehicles, most measures to reduce air pollution are related to their operation. Solid waste disposal to landfill, construction waste disposal is carried out by the agreement with IE "Kabulov".
43. There are no breeding, feeding and settling areas of rare (red book) animals and their migration routes on the project territory. The Contractor will construct the cattle passes at the correct location. 10 precast concrete structures among 13 have been constructed, 8

of them are culverts and 2 are cattle passes (precast concrete 2,5x4m) PK 173+70, (precast concrete 2x2.5m) PK 62+03.41.

### 3.2. Site inspections

44. During the reporting period site inspections were carried out in order to monitor the EMP implementation, also evaluate the construction works compliance with environmental safeguards requirements. Information on each inspection is listed in Table 10 below.

**Table 11. Information on-site inspection**

Date	Auditor's name	Audit purpose	Inspection conclusion summary
12.07.2019	CSC: Novossadova Natalya  Contractor: Dautova Zh. a head of Health and Safety department and environmental specialist Lot 7	Monitoring of the EMP measures progress on Lot 5 and Lot 6	Base camp is being constructed. Works have been completed for 80% on Lot 5. Recommendations for the arrangement of septic tanks, temporary storage areas for solid waste,  Places for installation of fire safety boards.  On Lot 6, additional accommodations for the Engineer have been installed in base camp.  On Lot 5, the Engineer's accommodations and office are being assembling.  Dust control measures are not carried out in base camp. The construction of mechanical repair shop is not included in base camp plan.
04.08.2019	CSC:  Contractor: Project manager Lot 5, Road Safety specialist, Safety specialist and environmental specialist Lot 4	Lot 4  Lot 5	Environmental specialist has mobilized on Lot 4 site.  Base camp is populated, fencing and security is provided.  Water tanks are installed, permits are expected to be received.  The site is provided with the necessary equipment for dust control. Population does not allow to use water from Sagiz river for dust control. The Contractor uses water from the lowlands where precipitation collects and takes water from water intake in Sagiz village.  The stationary fuel filling station is not brought into compliance with the technical regulations for such facilities. The tank is not installed on plates, the platform under the tank is not concreted, access to fuel filling station is open to unauthorized persons, fire safety is not provided, filling station

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			operator does not have access and has not been trained.
6.08.2019	CSC: Contractor Lot 6: Environmental specialist, Safety and Road Safety specialist	Survey of the implementation of environmental safeguard measures and safety measures on site	The audit of documents showed that there are log books for SW disposal, waste passports, fire safety boards and offices of the Engineer and Contractor on site.  Dust control is provided on the site.  Works on planting the residential part of base camp are on progress.  Environmental specialist submits reports on a quarterly basis. Industrial monitoring of site is carried out.
22.09.2019 23.09.2019	CSC: Contractor: Environmental specialist Satvaldiyev A. Safety and Road Safety specialists	The EMP monitoring on Lots 4, 5, 6	Lot 4: Environmental specialist submits monthly reports on the EMP implementation.  Recommendations: to eliminate FLM spill at the production base, to conduct environmental lectures on preventing pollution by FLM and clean up SW along the road  Lot 5: the schedule of dust control in base camp is not observed, there are not enough containers for SW, there is no waste segregation, there is no temporary storage area for used oil, tires and filters.  Lot 6, base camp meets the sanitary requirements, the environmental specialist of CSC has no remarks.
01.10.2019 General mission of ADB	Mr. Dong-Soo Pyo, Director, CWTC/ Head of Mission; Mr. Jiangbo Ning, Chief Transport Specialist, CWTC; Mr. Nurlan Djenchuraev, Chief Environmental Specialist; Ms/Mrs Aida Satylganova, CWOD-PSG; Ms/Mrs Asem Chakenova, Project Officer, ADB Residence in Kazakhstan; and Ms/Mrs Glenda Jurado, Project Analyst, CWTC.  Ms/Mrs Malika Babadzhanova, ADB Consultant	1) Work progress/ issues/ construction work quality; 2) Implementation compliance with the provisions of loan agreement; 3) Compliance with protective measures;	The issue of hiring environmental specialist for the Contractor Lot 4, Shanghai Construction Group, was solved by hiring a new environmental specialist at the beginning of September 2019. He succeeded in obtaining the necessary permits for borrow pits and concluding an agreement with waste disposal companies, which was one of the open issues to accelerate the construction work progress. The mission recommended to "Shanghai Construction Group" to improve the quality of local environmental management plans as instructed by the ADB consultant RETA, to improve fuel storage by arranging a containment zone, and increase the number of warning signs and instructions in the construction camp Lot 4.  The mission recommended to the Contractors of Lots 5, 6 and 7 to hire another qualified environmental

	Ms/Mrs Safia Shafiq, ADB Consultant		specialist who would have sufficient information to monitor the implementation of environmental management plans.
19.10.2019	CSC: Satvaldiyev Azamat environmental specialist Lot 4  Zhantokova Gulzhanat environmental specialist "Akzhol kurylys" LLP Lot 6	Monitoring of sites Lots 4, 5, 6	Lot 4: remarks of previous audit have been eliminated.  There is an insufficient dust control on construction site.  Lot 5: environmental specialist has not mobilized on the site, remarks are not eliminated.  Lot 6: there are remarks, that can be eliminated during work process
16.11.2019 26.11.2019	CSC:  Without participation of Contractor	Lot 4, Lot 5 and Lot 6	Lot 4: there are remarks, that can be eliminated during work process - not observing the segregation of solid waste, base camp dustiness, it is necessary to fill the territory.  Lot 5: no changes. There is no environmental specialist on the site, the remarks have not been eliminated. The EMP is not implemented fully. Environmental specialist Lot 6 periodically visits this site, organize IEM without notifying the Engineer.  Lot 6: no remarks.
18.12.2019	CSC Environmental specialist  Safety and Road Safety specialists Lot 4 and Lot 6  Environmental specialists Lot 4 and Lot 6	Survey of the implementation of environmental safeguard measures and safety measures on site	Lot 4: there are remarks, that can be eliminated during work process. Materials are being prepared for winter maintenance of road.  Lot 5: no changes since previous periods.  Lot 6: no remarks.

### 3.3. Tracking of issues (Based on Non-Conformance Notices)

45. During the reporting period, 7 significant non-conformances have been found out on Lot 4 and the following corrective actions have been identified: to provide the portable pallets for FLM tank, to install an impervious fence and foundation, to place tanks for fuel with a capacity 110% of tank volume, also related to social part – to arrange a dryer room in laundry, to enlarge eating place, to install hangers in the canteen, to arrange a place for storing outdoor clothes and shoes separately from a living area, to divide eating place and dirty dishes place.
46. During the reporting period, 7 non-conformances have been identified on Lot 5: it is necessary to arrange a place for temporary storage of production waste in accordance with the Sanitary rules of the RK, to concrete the territory of temporary FLM storage, to provide the portable pallets for FLM, to install warning information signs, to organize a

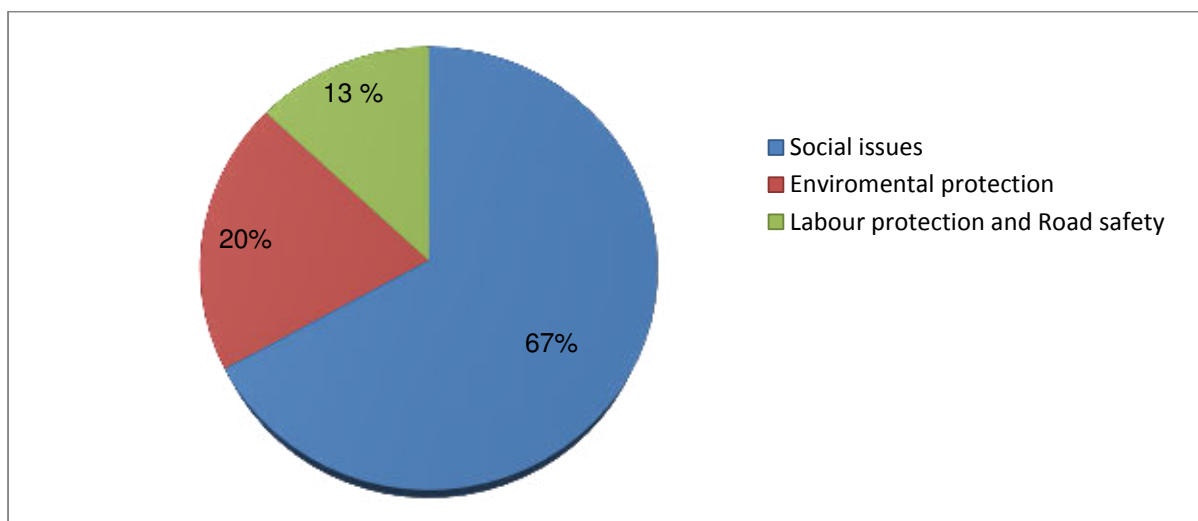
sufficient watering on construction site, also related to sanitary part – to install a lighting, to arrange accommodations in compliance with the Sanitary rules of the RK, to speed up installation process of heating system in camp facilities, to supply a hot and cold water in accommodations.

47. Regarding Lot 6, to organize a sufficient watering on construction site and it was recommended to install curtains.
48. There are no any non-conformances regarding EP on Lot 7 site due to the completion of main construction and installation works.
49. A general picture of non-conformances identified from all sites of this project is given on the Picture 3.1 below.
50. Summary of issues tracking progress for the current period is presented in the Table 12 below.

**Table 12. Summary table**

Total number of issues on the project	15
Number of open issues	2
Number of closed issues	13
Solving Percentage	87%
Open issues during the reporting period	15
Closed issues during the reporting period	13

**Picture 3.1 Summary of issues based on non-conformance notices**



**Picture 3.2. Issues of the reporting period by priority**

51. Correspondences for the reporting period from the CSC to Contractors regarding non-conformances are shown below:

- Letter No. DSE-AM-2-1245 dated 11.07.2019 "Compliance with Environmental Measures" Lot 4
- Letter No. DSE-AM-2-1246 dated 11.07.2019 "Non-compliance with Contractual Agreements" Lot 5

- *Letter No. DSE-AM-2-1247 dated 11.07.2019 "Non-compliance with Contractual Agreements" Lot 4*
- *Letter No. DSE-AM-2-1248 dated 11.07.2019 "Air Pollution by Dust – Work Suspension" Lot 4*
- *Letter No. DSE-AM-2-1346 dated 12.08.2019 "Action Plan elimination of EP discrepancies" Lot 4*
- *Letter No. DSE-AM-2-1361 dated 21.08.2019 "Monthly Environmental Monitoring Report" Lot 7*
- *Letter No. DSE-AM-2-1363 dated 21.08.2019 "Monthly Environmental Monitoring Report" Lot 4*
- *Letter No. DSE-AM-2-1364 dated 21.08.2019 "Monthly Environmental Monitoring Report" Lot 5*
- *Letter No. DSE-AM-2-1365 dated 21.08.2019 "Monthly Environmental Monitoring Report" Lot 6*
- *Letter No. DSE-AM-2-1585 dated 30.11.2019 "Disapproval of the candidate for position environmental specialist" Lot 4*

### **EMP approval**

1. *Letter No. DSE-AM-2-1157 dated 08.06.2019 "EMP" Lot 5*
2. *Letter No. DSE-AM-2-1160 dated 08.06.2019 "EMP" Lot 6*
3. *Letter No. DSE-AM-2-1199 dated 25.06.2019 "EMP" Lot 4*

### **3.4. Trends**

52. During the reporting period, site monitoring and audits of construction sites did not reveal complaints about environmental safeguards non-compliance on Lot 7. All EMP activities are executed on Lot 4, Lot 5 and Lot 6. Previously raised issues of concern regarding compliance with protective measures, such as ignoring the contractual obligations related to EP by the Contractor in terms of implementing the approved EMP, in terms of organizing and conducting IEM, have actually been eliminated as an approved environmental specialist was appointed to fulfill his obligations under the contract.

### **3.5. Unforeseen environmental impacts or risks**

53. During the reporting period, monitoring of construction sites did not reveal unforeseen impacts on Lot 7, Lot 6 and Lot 5 and Lot 4 sites.

#### **4. ENVIRONMENTAL MONITORING RESULTS**

54. Control and management focused on the following activities:

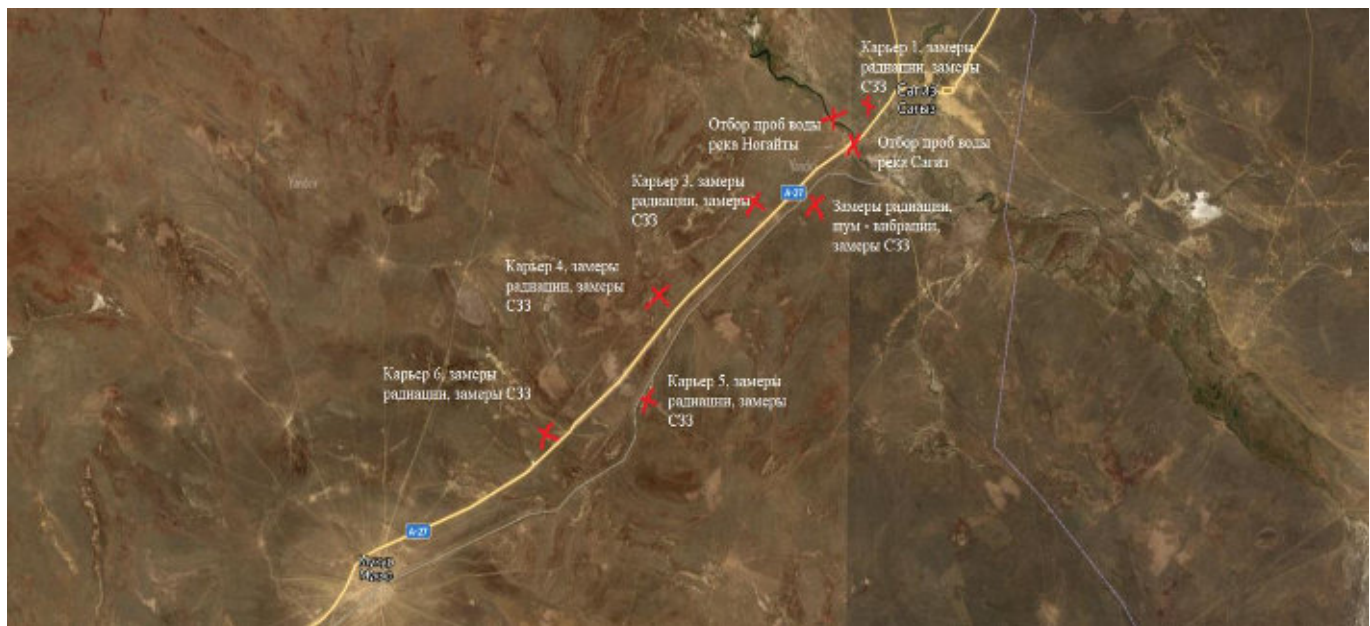
- supervision on site: visit with Contractors' environmental specialists and joint work audit;
- work photo records: with photo taking date and time;
- interviewing people on site: questions about impacts to workers, to environment, health and safety issues, also safety during work process;
- meeting and consultation about issues and identified non-conformances,
- checking documents: test reports of instrumental measures, reviewing environmental specialists' monthly and semi-annual reports;
- checking legal documents: permissions and all legal documents, related to environmental aspects.

##### **4.1. General monitoring information conducted during the current period**

55. During the reporting period, Lot 4 signed an agreement with "West Dala" LLP No.377-2019 dated September 30, 2019 for disposal and storage of production waste. The temporary storage of waste is defined on site and garbage containers for the different types of waste are marked, waste passports have been agreed by the Environment Department of Atyrau region and agreement was concluded for waste removal and disposal. Environmental monitoring will be carried out quarterly in Sagiz river based on the agreement with "Econormativ" LLP, agreement No.SCGK-2608 dated August 26, 2019. Also, based on this agreement, specialists of environment laboratory conducted measurements of emissions of air pollutants on the reconstructed road. The Contractor will ensure that the temporary removal or relocation of communication lines is carried out in coordination with the relevant utilities and local population. Coordination with local population on such issues will be executed through monthly meetings of local population with the participation of the Contractor, Engineer and public members.
56. Lot 5, the project documents of Asphalt Plant are available on web portal of state expertise, there were remarks and they have been corrected. Emission permits have been received for the proposed borrow pits No.7, No.8, No.10, No.11, No.12, No.23 and the project borrow pits No.1 and No.2. Agreements were concluded with IE "Kabulov" No.07/2019 dated 06.03.2019 for the removal of solid waste, hazardous waste and effluents and No.247/3/AZHK dated July 1, 2019 for removal services of liquid household waste. Boxes for appeals and recommendations were Installed at the Contractor's site, in the offices of CSC. During the reporting period, an agreement have not been concluded with IE Sadykov for drinking water supply, it is planned for the 1st quarter of 2020, as a source of drinking water is used water tower in Mukur village. The environmental specialist submitted a semi-annual report on the EMP implementation.
57. Lot 6, the EMP was approved by the CSC and agreed by the PMC on 5.06.2019, taking into account the remarks of the ADB's national consultant. On 13.06.2019, the Contractor signed an agreement for conducting IEM. Based on the service agreement, specialists of environmental laboratory "Analytical laboratory for environmental protection" LLP monitor atmospheric air, for the 3rd quarter was conducted on 18.09.2019. Agreements was concluded with "Analytical laboratory for environmental protection" LLP agreement No.17/19 dated 17.01.2019 and with "Econormativ" LLP agreement No.211/3/AZHK dated

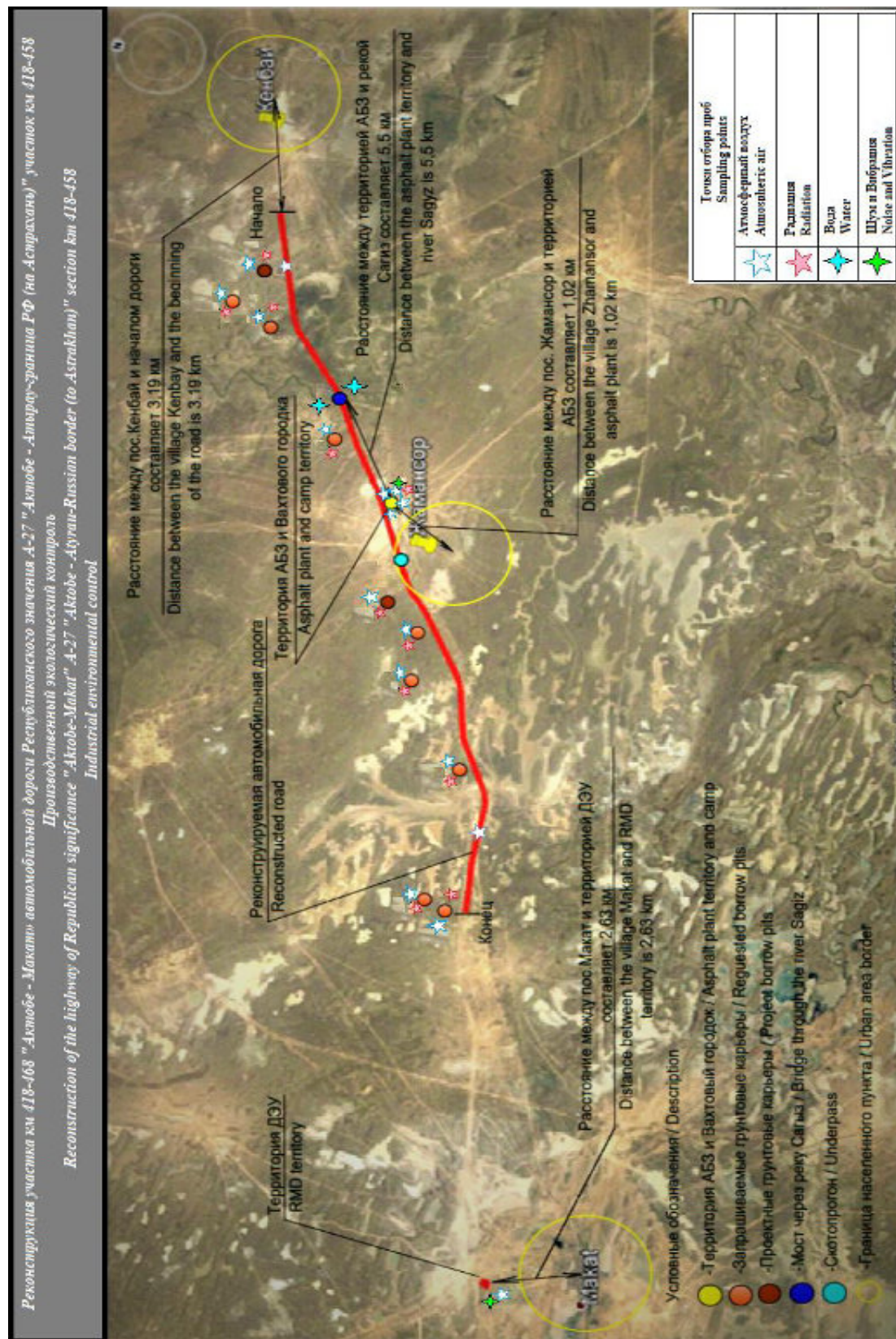
04.07.2019. Each facility collects, stores and delivers production waste, it is disposed in the landfill of IE "Kabulov" and IE "Nauryzbekov E.D.". Soil cover control is not provided by the organization. The Contractor will ensure that the temporary removal or relocation of communication lines is carried out in coordination with the relevant utilities and local population. Coordination with local population on such issues will be executed through monthly meetings of local population with the participation of the Contractor, Engineer and public members.

**Picture 4.1 – Location of sampling points of noise, vibration, air and soil  
Lot 4**





**Picture 4.3 – Location of sampling points of noise, vibration, air and soil Lot 6**




58. Dust control measures on the bypass road have been speeded up from July to December 2019. 12 water trucks have worked. 1) PK194+00 to 212+00, 2) PK221+00 to 237+00, 3) PK244+00 to 263+00, 4) PK300+00 to 328+00, 5) PK333+00 to 337+00, 6) PK342+00 to 350+00, 7) PK96+00 to 76+00, 8) PK119+00 to 109+00. In these areas, works were carried out on levelling and compaction of bypass roads, also elimination of subsidences, potholes, bumps, blowups and other damages on the carriageway of bypass road.

59. In the previous reporting period, the CSC prepared and issued to proceed on Lots 4, 5 and 6 recommendations to eliminate identified issues. During the reporting period, monitoring of these sites showed that environmental specialists Lots 4, 5 and 6 took into account violations and eliminated them. Non-conformances elimination details for the second half of 2019 are shown in the table 13 below.



**Table 13: Monitoring of progress of recommendations on elimination of environmental non-conformances on Lots 4, 5 and 6 for July-December 2019**

No.	Issues of concern	Site / LOT/ PHOTO Responsible	Status of activities progress	Results of site EM with regard to identified non- conformances
1	To provide the environmental specialist with the necessary resources for work: a personal laptop, a digital camera, safety clothes and shoes, payment for phone services, access to Internet at the work place and in accommodation in base camp	Project manager LOT 4	The environmental specialist is provided with all necessary things for work and accommodation in base camp.	Provided
2	To prepare a project for Asphalt plant, necessary document for generator, fuel filling station, to complete activities on obtaining exploration permission for borrow pits	Project manager Enviromental specialist LOT 4	Project is being prepared for Asphalt plant by "Altai LTD" based on an agreement. There are all permit documents for generator and fuel filling station. Also exploration permission for borrow pits has been received.	Implemented
3	To carry out environmental monitoring and base line according to EMP	Project manager Enviromental specialist LOT 4	Enviromental monitoring service is provided by "Econormativ" LLP based on an agreement.	Implemented
4	To prepare waste passports and waste disposal logbook	Project manager Enviromental specialist LOT 4	Passports for hazardous waste are prepared by "Amin" LLP based on an agreement and approved by Environment department of Atyrau region.	Implemented




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5	To have complaints and appeals registration book, to install boxes for appeals in base camp and in front of checkpoint with indication of contact numbers	Project manager Environmental specialist LOT 4	There is complaint registration book with contact numbers, also boxes for appeals of individuals and entities are installed in front of checkpoint and in facility	Implemented
6	To arrange a place for temporary collection and storage of solid waste and production waste in accordance with EMP	Project manager Environmental specialist LOT 4	All types of waste are stored in designated areas in metal containers. Containers are installed on special reinforced concrete platforms and are closed with metal lids. The place for temporary waste storage has been determined on the territory and containers for different types of waste are marked.	Implemented
				
7	To conclude an agreement with an organization for removal and disposal of solid waste and production waste	Project manager Environmental specialist LOT 4	An agreement was concluded with "West Dala" LLP for the provision of services for further processing, neutralization, recycling, sorting and removal of waste	Implemented
8	Water spraying during road construction works, namely dust control	Project manager Environmental specialist LOT 4	In dry and windy weather condition, every 2 hours and during all working hours, water is sprayed on	Implemented

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			the construction site, namely, dust control	
9	To arrange FLM tank operation in due course	Project manager Environmental specialist LOT 4	To clean up soil pollution from FLM filling, also to prevent land pollution and make it properly	Implemented
				
10	To increase frequency of dust control	Project manager Environmental specialist LOT 5	To reduce dust level during construction works by watering. The Contractor's environmental specialist Lot 5 is recommended to	Ongoing

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		plan watering where it is necessary in order to prevent dust impact to local people	
11	To arrange a place for temporary collection and storage of solid waste and production waste in accordance with EMP	Project manager Enviromental specialist LOT 6	All types of waste are stored in designated areas in metal containers. Containers are installed on special reinforced concrete platforms and are closed with metal lids. Containers by type of waste are marked accordingly.
			
12	Pollution/littering of construction site by waste	Project manager Enviromental specialist LOT 5	To carry out a Saturday clean-up activity, territory cleaning.  To storage and dispose waste in accordance with EMP and service agreement
			
13	To move toilet in the construction camp at least 5m from temporary waste storage place	Project manager Enviromental specialist LOT 6	Toilet was moved according to the requirement
			Implemented



#### 4.1.1. Environmental measurements on Lot 7 site

60. All work activities indicated in the contract have been completed and handed over to the Employer. Additional work quantities are expected to be added to the main contract. Now design and estimate documentation is under consideration by the State Expertise of projects. The approximate date of receiving the state expertise conclusion is March-April 2020.

##### 4.1.1.1. Noise and vibration

61. According to the Guidelines of the International Finance Corporation "Environment, Health and Safety Guidelines" MPL of noise for construction areas is 85 dBA and a peak (instantaneous) noise is not higher 140dBa, and for residential areas is 70dBa. The national standard (Hygienic Standard No.169 dated 28.02.2015) defines that MPL of noise at construction areas is 80 dBa and for operator's work in laboratory, Asphalt plant is 90 dBa, and MPL at residential areas is 60 dBa. The national standard was used for this report because it is more demanding for the meaning of MPL.

62. Vibration and noise level measurements were carried out by specialists of Atyrau regional RSE "National Center of Expertise" of the Committee for Public Health Protection of the Ministry of Health of the Republic of Kazakhstan. According to monitoring reports, measurements were taken at the same place with base lines: road construction site (beginning km 487, middle km 500 and end km 504), at the border of Sanitary Protection Zone of Asphalt plant km 510 (beginning, middle and end).

63. According to noise level measurements report, in case of the maximum permissible level 80 dBA (pursuant to SS) on Asphalt Plant it was within 66-77dBa. Noise level measurements at road construction points were within the same limits.

64. According to vibration level measurements report, the measurements from these sites showed that MPL not exceeded at any measurement points. As per measurements reports, the maximum value was 54.2 dB in the Contractor's laboratory and 60.3 dB in the operator's room. These values are not higher than permissible vibration level.

65. All indicators on Noise and Vibration do not exceed MPL. It is necessary to take into account the recommendations (Environmental, Health and Safety Guidelines, 30.04.2007 IFC) about safeguards: personal protective equipment, time protection if noise level over 80 dBA. There are details of noise and vibration measurement reports in Attachment 4.

**Table 14: Results of noise and vibration measurement on Lot 4**

Measurement points	Primary vibration measurement before the project commencement 25.09.18 (dB)	Permissible level (normal dB for vibration)	25.09.2019 dB
Nos.1-3 (fume cupboard)	45	60	45
No.4 (thermostat)	40		40
No.5	40		40

Measurement points	Primary noise measurement before the project commencement 25.09.18 (dBA)	Permissible level (normal dBA for noise)	25.09.2019 dBA
No.1 (laboratory fume cupboard)	45	112-127	63
	40		65
	48		60
No.2 (drying box)	45	112-127	59
	40		51
	45		51

#### 4.1.1.2. Soil

66. Soil pollution measurement. There is no permanent placement of production waste on the enterprise territory; temporary storing of production and consumption wastes is conducted in compliance with necessary requirements that exclude impact on the soil cover. Traffic of construction machineries is carried out on existing roads. Due to it, soil monitoring is not included in environmental production control plan. But at the same time, in order to reduce impact on land resources, the Contractor included a number of activities in the Environmental Management Plan of this project:

- compliance with the technological work procedure;
- fuelling and replacement of FLM in designated areas;
- dust control at construction sites;
- traffic of construction machineries is carried out on existing roads.

#### 4.1.1.3. Water quality

67. As sources of construction and drinking water, water is used from water towers located in Dossor, Makat villages, which are serviced by "Temirzholzhylu-Atyrau" LLP. During

construction works, water is used for household and industrial needs. Water control is not provided, because drinking and construction water supply is provided from culvert, which is located in Makat village and serviced by PSE "Atyrau Su Arnasy". The drinking water quality meets sanitary and epidemiological requirements.

68. There are surface water sources like Sagiz and Nogaity rivers on the territory of the project works of Lot 4 and 6. Temporary watercourses occur only during heavy rain or heavy snow melt. The hydrographic network in the area is practically undeveloped. Surface water resources are only the flow of Sagiz river and the Nogaity river coming from Aktobe region, as well as local flow of small temporary watercourses and small rivers of the second and third type. Sagiz river enters its lower reaches, getting lost in Tenteksor. Its valley in this section is not clearly, its slopes are not very gentle and joins imperceptibly with the surrounding area. The riverbed is very winding. Sagiz river does not have a permanent flow for 11 months throughout the area (about 30 km). The distance from the project site Lot 4 to Sagiz river is 9 km, the distance from Lot 6 to Sagiz river is 40 km. The Caspian Sea is more than 100 km away. Contractor Lot 4 and 6 will carry out quarterly environmental monitoring in Sagiz river based on an agreement No.SCGK-2608 dated 26 August, 2019 with "EcoNormative" LLP, Lot 6 – agreement No. 211/3/AZHK dated 04.07.2019 with "EcoNormative" LLP.

Water resources Lot 4

No.	Sampling point	Period	Note
1	Sagiz bridge construction area	Test report (t/r) No.1209 dd 30.09.2019 Test report (t/r) No.1303 dd 25.11.2019	PK 337 km
2	Nogaity bridge construction area	Test report (t/r) No.1210 dd 30.09.2019 Test report (t/r) No.1304 dd 25.11.2019	PK 338 km

**Results of physical and chemical analysis of surface water  
 from Sagiz river and Nogaity river for 3 and 4 quarters of 2019**

No	Indicators, units of measurement	Requirement by regulatory documents	Actual value			
			Sagiz river		Nogaity river	
			T/r No.1209	T/r No.1303	T/r No.1210	T/r No.1304
1	PH	6,0-9,0	7,340	8,240	7,540	7,970
2	Oil products, mg/dm <sup>3</sup>	no more than 0,1	0,410	0,006	0,033	0,038
3	Chemical oxygen demand, mg/dm <sup>3</sup>	-	57,8	78,0	61,9	79,3
4	Nitrate nitrogen, mg/dm <sup>3</sup>	no more than 45	8,620	8,750	8,620	8,710
5	Nitrite nitrogen, mg/dm <sup>3</sup>	no more than 3,3	0,051	0,065	0,051	0,148
6	Copper, mg/dm <sup>3</sup>	1,0	0,001	0,001	0,000	0,000
7	Zinc, mg/dm <sup>3</sup>	5,0	0,003	0,008	0,002	0,009

8	Lead, mg/dm <sup>3</sup>	0,03	0,004	0,001	0,002	0,001
9	Dry residue, mg/dm <sup>3</sup>	1000	8246,0	1136,0	5188,0	1079,0
10	Hardness, mg/L	7.0(10)	15,400	5,460	10,300	5,080
11	Muddiness	-	17,30	36,20	19,10	34,80

69. The Test report No.1209 showed the exceedance of oil products in Sagiz river water. The Contractor's environmental specialist submitted explanatory information for this case: due to the dismantling works on this site, preparation and cleaning of pipes for the spring period, also the regular traffic of other vehicles. Monitoring on this site is planned for the 2nd quarter of 2020 and will be under the special control of the CSC's environmental specialist.

70. Temporary watercourses occur only during heavy rain or heavy snow melt on the territory of the project works of Lot 5. Surface water resources are only the flow of Mukur river coming from Aktobe region, also local flow of small temporary watercourses and small rivers of the second and third type. Mukur river does not have a permanent flow for 11 months throughout the area (about 20 km). In summer the river dries up completely. An agreement No 211/3/AZHK dated 04.07.2019 was concluded with "EcoNormative" LLP for quarterly IEM.

According to EMP, Mukur river is monitored, but water monitoring for the second half of year was not carried out due to the lack of water/flow in the river. The next monitoring is planned for the second quarter of 2020.

#### 4.1.1.4. Atmospheric air quality

71. Monitoring had been done at the points specified in the Contractor's SSEMP. According to submitted sampling reports and their results, during sampling were recorded atmospheric air, climatic parameters: wind speed, direction, barometric pressure, humidity, temperature. Measurements on Lot 7 were made on June 7, 2019 by the following indicators: inorganic dust, suspended particulates on Asphalt plant, nitrogen dioxide, sulfur dioxide, formaldehyde, hydrocarbons C12-C19 and hydrogen sulfide. There was not exceedance of MPC, it is shown in the final report. There are air pollution measurement reports of Lot 4 for the second half of year in Attachment 3 attached hereto, Table 15 shows indicators (with baseline indicators) at Asphalt plant (km 504), at borrow pits Nos. 1, 2, 3, 4, 5, 6, on construction site and at two points of construction bridge.

Due to a number of reasons, such as the contract termination with an unfair Contractor "Tasyapi Insaat Taahut ve Ticaret A. S." in 2018, the conclusion and signing of new contracts, long financing procedures of new Contractors, etc. the basic monitoring of atmospheric air on Lots 5 and 6 was conducted in June 2019, as evidenced by the research test reports: Lot 5 – Nos. 325, 326, 327 dated 29.06.2019, Lot 6 – Nos. 239, 240, 241 dated 13.06.2019 of the following indicators: CO, SO<sub>2</sub>, NO<sub>2</sub>, NO, CH<sub>2</sub>O, C12-19, Soot and inorganic dust. Lot 4, due to the absence of environmental specialist on the project until September, conducted the first monitoring in September 2019, which will be the baseline monitoring.

72. According to research test reports, the pollution level on Lot 4, 5 and 6 sites does not exceed the MPC for all monitored indicators. The environmental impact is temporary and it does not have a negative impact.

**Table 15: Results of atmospheric air measurements on Lot 4**

Sampling point	Pollutants (mg/m <sup>3</sup> )	MPC level mg/m <sup>3</sup>	Concentration, mg/m <sup>3</sup>	
			30.09.2019	09.12.2019
Asphalt Plant area	CO	5,0	0,733±0,01	0,858±0,01
	NO	0,4	0,0113	0,0093
	NO <sub>2</sub>	0,2	0,0018	0,0088
	SO <sub>2</sub>	0,5	0,0121	0,0121
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,044	0,048
	Hydrogen sulfide	0,008	0,0010	0,0012
	Inorganic dust	0,15	0,0091	0,0073
Borrow pit No.1	CO	5,0	0,944±0,01	-
	NO	0,4	0,0113	-
	NO <sub>2</sub>	0,2	0,0121	-
	SO <sub>2</sub>	0,5	0,0127	-
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,031	-
	Hydrogen sulfide	0,008	0,0012	-
	Inorganic dust	0,15	0,0068	-
Borrow pit No.2	CO	5,0	0,731±0,01	-
	NO	0,4	0,0098	-
	NO <sub>2</sub>	0,2	0,0081	-
	SO <sub>2</sub>	0,5	0,0118	-
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,025	-
	Hydrogen sulfide	0,008	0,0010	-
	Inorganic dust	0,15	0,0073	-

<b>Borrow pit No.3</b>	CO	5,0	0,811±0,01	-
	NO	0,4	0,0110	-
	NO <sub>2</sub>	0,2	0,0098	-
	SO <sub>2</sub>	0,5	0,0068	-
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,029	-
	Hydrogen sulfide	0,008	0,0011	-
	Inorganic dust	0,15	0,0071	-
<b>Borrow pit No.4</b>	CO	5,0	0,772±0,01	-
	NO	0,4	0,0081	-
	NO <sub>2</sub>	0,2	0,0073	-
	SO <sub>2</sub>	0,5	0,0069	-
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,033	-
	Hydrogen sulfide	0,008	0,0012	-
	Inorganic dust	0,15	0,0072	-
<b>Borrow pit No.5</b>	CO	5,0	0,834±0,01	-
	NO	0,4	0,0071	-
	NO <sub>2</sub>	0,2	0,0067	-
	SO <sub>2</sub>	0,5	0,0059	-
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,029	-
	Hydrogen sulfide	0,008	0,0010	-
	Inorganic dust	0,15	0,0069	-
<b>Borrow pit No.6</b>	CO	5,0	0,731±0,01	-
	NO	0,4	0,0095	-
	NO <sub>2</sub>	0,2	0,0087	-
	SO <sub>2</sub>	0,5	0,0087	-
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,051	-

	Hydrogen sulfide	0,008	0,0011	-
	Inorganic dust	0,15	0,0072	-
<b>Road reconstruction site</b>	CO	5,0	0,931±0,01	0,861±0,01
	NO	0,4	0,0122	0,0089
	NO <sub>2</sub>	0,2	0,0117	0,0075
	SO <sub>2</sub>	0,5	0,0144	0,0112
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,153	0,033
	Hydrogen sulfide	0,008	0,0012	0,0010
	Inorganic dust	0,15	0,0073	0,0089
<b>Sagiz bridge construction area</b>	CO	5,0	0,921±0,01	0,843±0,01
	NO	0,4	0,0119	0,0073
	NO <sub>2</sub>	0,2	0,0119	0,0071
	SO <sub>2</sub>	0,5	0,0134	0,0121
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,108	0,041
	Hydrogen sulfide	0,008	0,0010	0,0012
	Inorganic dust	0,15	0,0065	0,0079
<b>Nogaity bridge construction area</b>	CO	5,0	0,948±0,01	0,871±0,01
	NO	0,4	0,0113	0,0068
	NO <sub>2</sub>	0,2	0,0110	0,0073
	SO <sub>2</sub>	0,5	0,0123	0,0119
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,098	0,037
	Hydrogen sulfide	0,008	0,0011	0,0011
	Inorganic dust	0,15	0,0069	0,0077

**Table 16. Results of atmospheric air measurements on Lot 5**

<i>Sampling point</i>	<i>Pollutants (mg/m<sup>3</sup>)</i>	<i>MPC level mg/m<sup>3</sup></i>	<i>Actual concentration mg/m<sup>3</sup></i>
			<b>09.12.2019</b>
<b>Borrow pit area SPZ South-east part</b>	CO	5	0,947
	NO	0,4	0,0076
	NO <sub>2</sub>	0,2	0,0072
	SO <sub>2</sub>	0,5	0,0094
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,059
	Hydrogen sulfide	0,008	0,0012
	Inorganic dust	0,15	0,0084
<b>Borrow pit area SPZ South part</b>	CO	5	0,951
	NO	0,4	0,0078
	NO <sub>2</sub>	0,2	0,0074
	SO <sub>2</sub>	0,5	0,0096
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,061
	Hydrogen sulfide	0,008	0,0013
	Inorganic dust	0,15	0,0085
<b>Borrow pit area SPZ South-west part</b>	CO	5	0,944
	NO	0,4	0,0074
	NO <sub>2</sub>	0,2	0,0069
	SO <sub>2</sub>	0,5	0,0092
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,057
	Hydrogen sulfide	0,008	0,0011
	Inorganic dust	0,15	0,0083
<b>Borrow pit area SPZ North part</b>	CO	5	0,941
	NO	0,4	0,007
	NO <sub>2</sub>	0,2	0,0066
	SO <sub>2</sub>	0,5	0,0088
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,052
	Hydrogen sulfide	0,008	0,001
	Inorganic dust	0,15	0,0081
<b>Borrow pit territory</b>	CO	5	0,941
	NO	0,4	0,0073
	NO <sub>2</sub>	0,2	0,0068

	SO <sub>2</sub>	0,5	0,0091
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,054
	Hydrogen sulfide	0,008	0,0011
	Inorganic dust	0,15	0,0083
-			<b>30.09.2019</b>
<b>Asphalt Plant area Organization territory</b>	CO	5	0,751±0,01
	NO	0,4	0,0122
	NO <sub>2</sub>	0,2	0,0119
	SO <sub>2</sub>	0,5	0,0142
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,036
	Hydrogen sulfide	0,008	0,0011
	Inorganic dust	0,15	0,0084
<b>Asphalt Plant area SPZ South-west part</b>	CO	5	0,752±0,01
	NO	0,4	0,0124
	NO <sub>2</sub>	0,2	0,0119
	SO <sub>2</sub>	0,5	0,0146
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,038
	Hydrogen sulfide	0,008	0,0012
	Inorganic dust	0,15	0,0088
<b>Asphalt Plant area SPZ West part</b>	CO	5	0,755±0,01
	NO	0,4	0,0127
	NO <sub>2</sub>	0,2	0,0122
	SO <sub>2</sub>	0,5	0,0148
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,041
	Hydrogen sulfide	0,008	0,0013
	Inorganic dust	0,15	0,0091
<b>Asphalt Plant area SPZ North part</b>	CO	5	0,753±0,01
	NO	0,4	0,0122
	NO <sub>2</sub>	0,2	0,012
	SO <sub>2</sub>	0,5	0,0145
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,037
	Hydrogen sulfide	0,008	0,0011
	Inorganic dust	0,15	0,0086
<b>Asphalt Plant area</b>	CO	5	0,750±0,01
	NO	0,4	0,0122

<b>SPZ East part</b>	NO <sub>2</sub>	0,2	0,0117
	SO <sub>2</sub>	0,5	0,0141
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,033
	Hydrogen sulfide	0,008	0,0011
	Inorganic dust	0,15	0,0081
<b>Borrow pit area</b>	CO	5	0,794±0,01
	NO	0,4	0,0087
	NO <sub>2</sub>	0,2	0,0088
	SO <sub>2</sub>	0,5	0,0121
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,039
	Hydrogen sulfide	0,008	0,0012
	Inorganic dust	0,15	0,0084
<b>Road reconstruction site</b>	CO	5	0,834±0,01
	NO	0,4	0,0099
	NO <sub>2</sub>	0,2	0,0087
	SO <sub>2</sub>	0,5	0,0094
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,048
	Hydrogen sulfide	0,008	0,0011
	Inorganic dust	0,15	0,0077

**Table 17: Results of atmospheric air measurements on Lot 6**

Sampling point	Pollutants (mg/m <sup>3</sup> )	MPC level mg/m <sup>3</sup>	Concentration, mg/m <sup>3</sup>
			09.12.2019
<b>Road section PK 121</b>	CO	5,0	0,838
	NO	0,4	0,0019
	NO <sub>2</sub>	0,2	0,0121
	SO <sub>2</sub>	0,5	0,0117
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,068
	Hydrogen sulfide	0,008	0,0012
	Inorganic dust	0,15	0,0092
<b>Road section</b>	CO	5,0	0,812

<b>PK 150</b>	NO	0,4	0,0119
	NO <sub>2</sub>	0,2	0,0121
	SO <sub>2</sub>	0,5	0,0117
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,068
	Hydrogen sulfide	0,008	0,0012
	Inorganic dust	0,15	0,0092
<b>Borrow pit territory</b>	CO	5,0	0,933
	NO	0,4	0,0113
	NO <sub>2</sub>	0,2	0,0110
	SO <sub>2</sub>	0,5	0,0106
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,053
	Hydrogen sulfide	0,008	0,0010
	Inorganic dust	0,15	0,0073
<b>Asphalt Plant territory</b>	CO	5,0	0,721
	NO	0,4	0,0081
	NO <sub>2</sub>	0,2	0,0073
	SO <sub>2</sub>	0,5	0,0117
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,071
	Hydrogen sulfide	0,008	0,0010
	Inorganic dust	0,15	0,0073
<b>SPZ South-east part</b>	CO	5,0	0,724
	NO	0,4	0,0083
	NO <sub>2</sub>	0,2	0,0074
	SO <sub>2</sub>	0,5	0,0119
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,073
	Hydrogen sulfide	0,008	0,0011

	Inorganic dust	0,15	0,0075
<b>SPZ South part</b>	CO	5,0	0,726
	NO	0,4	0,0085
	NO <sub>2</sub>	0,2	0,0076
	SO <sub>2</sub>	0,5	0,0121
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,075
	Hydrogen sulfide	0,008	0,0012
	Inorganic dust	0,15	0,0075
<b>SPZ South-west part</b>	CO	5,0	0,722
	NO	0,4	0,0082
	NO <sub>2</sub>	0,2	0,0073
	SO <sub>2</sub>	0,5	0,0120
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,072
	Hydrogen sulfide	0,008	0,0010
	Inorganic dust	0,15	0,0074
<b>SPZ North part</b>	CO	5,0	0,718
	NO	0,4	0,0078
	NO <sub>2</sub>	0,2	0,0071
	SO <sub>2</sub>	0,5	0,0116
	Hydrocarbons C <sub>12</sub> -C <sub>19</sub>	1	0,069
	Hydrogen sulfide	0,008	0,0010
	Inorganic dust	0,15	0,0071

#### 4.2 Trends (general directions)

73. Construction works on Lot 7 were planned to be completed on May 30, 2019, but the Contractor issued a completion notice on July 31, 2019. In general, all EMP activities for this site were performed in the declared quantity and quality. The Contractor has completed construction of the following layers: wearing course SMA-20 h-5 cm, binder

course of c/g porous a/c, h-9 cm, upper base course of high porous a/c h-10cm, lower base course of CSSGM (C4), sub-base of SGM h-20 cm for entire length of site. Monitoring of environmental pollution was conducted in June 2019, there was not exceedance. During the reporting period, the final EMP report was submitted to the CSC on 04.09.2019.

74. The situation in Lot 4 regarding the EP and EMP implementation is not a matter of concern. An environmental specialist has mobilized on the site since September 2019. Reports are submitted timely, the Contractor is taking all measures to prevent negative impact on the environment.
75. On Lot 5 and Lot 6 the Contractor "Ak zhol Kurylys" LLP, which has a positive experience on Lot 7, is managing the environmental situation on these sites. The Contractor eliminates all non-conformances in a short time. The CSC considers that this Contractor will be able to carry out EP activities on a fairly good level, if environmental safeguard team is separately for each site.

#### 4.3 A summary of the monitoring results

76. Monitoring and audits of the CSC at all sites show that there is no negative impact on environment by construction work on Lot 7. The measures taken by the Contractor on Lot 7 to prevent a negative impact on environment are sufficient. Monitoring revealed that the Contractor follows the dust control schedule, plan for production waste removal and disposal, road safety plan, borrow pit management plan. The Contractor's activities have an acceptable impact on environment.

#### 4.4 Use of Material Resources

##### 4.4.1 Current Period

77. Lot 4. As sources of drinking water totally for July 4 482 m3, for August 244.4 m3, for September 690 m3, October 600 m3, for November 765 m3 water was used from water towers, which are serviced by "Temirzholylyu-Atyrau" LLP. Water demand for the construction period is 300 m3/day. During the construction work, water is used for domestic and construction needs.

On October 30, 2019, the project on specific requirements of water consumption and drainage was approved in the Ministry of Environment for obtaining a permit for special water use.

78. On Lot 5 power supply is carried out based on the agreement No.804 dated 12.03.2019 "AtyrauEnergosat". During the reporting period, applications were submitted for taking technical specifications for water supply, an agreement is going to be concluded with IE "Sadykov" in Atyrau.
79. On Lot 6 as sources of drinking water totally for the second half of year 2064 m3 water was used from water towers, which are serviced by IE "Sadykov" and "Makat- Su E" LLP and "Temirzholylyu-Atyrau" LLP. Water demand for the construction period is 120 m3/day. During the construction work, water is used for domestic and construction needs.

##### 4.4.2 Cumulative use of resources

**Table 18. Cumulative use of resources used for the 2nd half of 2019**

sites	Lot 6	Lot 5	Lot 4
-------	-------	-------	-------

resources			
Electricity, kWh	641970	401614	-
Natural gas, thousand m3	-	-	-
Drinking water, m3	1024	-	6781,4
Construction water, m3	1040	-	-

#### 4.5 Waste management

80. Waste management is organized by the Contractor according to the prepared EMP's attachment plans. The whole management process is carried out by two stages. The first stage consists the preparataion of places for temporary storage of SW and hazardous waste. The second stage includes the organization of waste disposal process with the involvement of specialized companies. There are places for temporary storage of SW and hazardous waste in the production base territory. Waste from the territory is stored on a special designated place for temporary storage with subsequent disposal through the involvement of specialized companies. Removal of SW and effluents is carried out by IE "Kabulov" and IE "Nauryzbekov" on Lot 6, all agreements are extended until the project completion.
81. Regarding Lot 4, all types of waste are stored in designated areas in metal containers. Containers are installed on special reinforced concrete platforms and are closed with metal lids. The place for temporary waste storage has been determined on the territory and containers for different types of waste are marked. Production waste is collected, stored and transported as it fills, disposed to landfill of "West Dala" LLP according to the agreement No.377-2019 dated September 30, 2019.
82. Lot 5 Contractor entered into agreements with specialized companies. Waste is disposed to landfill of IE "Kabulov" and "ZapKazService" LLP. Waste passports have been agreed by the Enviroment Department of Atyrau region.

##### 4.5.1 Current Period

**Table 19: Solid waste disposal information for the second half-year**

Site	Waste type	Unit of measure ment	Waste classification	Quantity	Waste disposal method / way
Lot 7	SW	m <sup>3</sup>	not hazardous	18	Removal and disposal to the landfill
	Liquid waste	m <sup>3</sup>	not classified	2 997	Removal and disposal to the landfill
Lot 6	SW	m <sup>3</sup>	not hazardous	40	Removal and disposal to the landfill
	Liquid waste	m <sup>3</sup>	not classified	100	Removal and disposal to the landfill
Lot 5	SW	m <sup>3</sup>	not hazardous	36	Removal and disposal to the landfill
	Liquid waste	m <sup>3</sup>	not classified	-	Removal and disposal to the landfill
Lot 4	SW	m <sup>3</sup>	not hazardous	36	Removal and disposal to the landfill
	Liquid waste	m <sup>3</sup>	not classified	-	Removal and disposal to the landfill

#### **4.5.2 Cumulative waste generation**

83. For the period of 2018-2019, cumulatively, 40.24 m<sup>3</sup> SW was removed from Lot 7. Cumulatively liquid waste was 3619 m<sup>3</sup>. From Lot 6, cumulatively, SW was 62 m<sup>3</sup>.
84. Based on the monitoring results of waste management activities, recommendations were given to the Contractors to include corrective actions in waste management plans. Environmental specialist of Lot 4, 5 and Lot 6 should do the following:
- To organize explanatory works for the Contractor's workers regarding issues of environmental safety on accommodations, construction sites and close areas to the villages.

#### **4.6. Health and Safety**

##### **4.6.1 Public Health and Safety**

85. During the reporting period, the Contractors conducted activities in accordance with the approved traffic safety management plans. Timely supervision and consultation of the Road Safety Engineer of CSC helped to ensure safety for traffic users and Contractor's personnel. During the audit periods, it was found out that relevant work were conducted by all Contractors. The site audit showed that there were not safety signs on bypass roads.

##### **4.6.2 Workers Health and Safety**

86. In order to ensure health safety, medical facilities are arranged on Lot 5, Lot 6 and Lot 7 sites. They are located on base camp territory. There are two certified medical workers in medical facilities. Every day in the morning before work all employees undergo a medical check-up for general health condition, then it is recorded in a logbook. This procedure is carried out by all employees of the Contractor, without exception. since it is necessary to take a permit to work from the medical worker. The Employees can also visit the medical facility at any time if they feel bad. The medical facilities of Lot 6 and Lot are equipped with all necessary medicines, according to the list for such facilities, and with medical supplies for the organization and provision of first aid. There are no medical facilities on Lot 4 and Lot 5, but they are required to be equipped with all necessary resources.
87. All Contractors prepared Health and Safety Programmes on sites. It includes health measures and preventive measures for non-proliferation of STI, STD, HIV / AIDS among employees and local public. During the reporting period this plan has been implemented by all Lots.
88. On Lot 6, accommodations, eating places (canteen), lavatory (toilet) are equipped with bactericidal irradiators - air disinfection equipment. Deratization and disinsection of accommodations and offices of base camp are carried out once a quarter. There are free contraceptives in medical facility.
89. On Lots 4, 5 and 6 it is noted that all employees when involve to work, they undergo introductory safety training. All records are written in logbooks of Road Safety, Health and Safety specialists, and checked by Supervision Consultant. Trainings are organized every day at work places, which are also recorded in logbook.
90. The list of logbooks, which the Contractor's specialists have:
- Registration book for introductory training;

- Registration book for trainings at work places;
- Logbook for fire safety trainings;
- Incident registration book;
- Logbook for Personal Protective Equipment provision;
- Logbook for testing and recharging of fire extinguishers;
- Registration book for medical check-up of drivers going to start work;
- Logbook for medical check-up of hired drivers;
- Registration book for employees, who seek medical attention;
- Logbook for introductory road safety trainings;
- Registration book for road accidents;
- Logbook for traffic offense;

Toolbox meetings about Safety and Road safety compliance are an important part of work and daily practice.

91. During the reporting period, road accident has taken place on Lot 5 km 370-418 on December 21, 2019 at 8:30 am on 39 km (PK 388+00) of bypass road of Aktobe-Makat reconstruction project, km 408, near the village Zhanterek, Kyzylkoga district (Contractor "Ak zhol kurylys" LLP). The car Lada Granta which following to the direction Zhamansor, exceeded the permissible speed, drove on the opposite carriageway and made head crush with the car Lexus LX 570. As a result of this accident (hard head crush), 2 passengers of Lada Granta died at the place of accident. The Commission recorded the normal condition of the carriageway of bypass road (width 12.9 m, no bend and no potholes), the availability of necessary warning road signs and special equipment for maintenance. Also, the Commission confirmed there was a clear weather with temperature -1°C, visibility 100% and no ice.

**Table 20: Statistics of incidents and accidents on the project**

Name	Lot 4	Lot 5	Lot 6	Lot 7
Road accident	0	1	0	0
Incident	0	0	0	0
Loss of labour capacity	0	0	0	0
Downtime due to incident	0	0	0	0
<b>Total:</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>

92. For the preventive purpose after road accidents, incidents described above, Health and Safety, Road Safety Engineer conducted unscheduled trainings with making appropriate records in the logbook for trainings.
93. There are posters for the prevention of STD and STI, HIV/AIDS in the medical facility. Newly involved employees are gotten information on the above subjects. All employees are provided with personal protective equipment. The canteen and dormitories are checked every day jointly with medical worker.
94. Additional safety measures on Lot 4, 5, 6 and 7 sites:

- In order to ensure the continuous traffic of vehicles and safety of company and public transport, road signs are detailed checked for availability, cleanliness and damage. Safety and Road Safety Department, Site managers and Supervision Consultant work closely, and coordinate each other;
- Health and Safety, Road Safety Engineers prepared a program for “Health and Safety at night time”, and also regularly inspect site during day and night time. If find out any violation of safety measures, a warning is issued also for the worker and for Road Safety, Health and Safety specialists of the Contractor, and in case of repeated violation, instructions and letters are prepared to eliminate found violations;
- Contractor’s specialists assist to civilians to eliminate technical failures of their vehicles. In general, the current state of compliance with safety measures and provision of road safety can be considered significantly improved as evidenced by accident statistics.

#### **4.7. Study (training)**

95. During the reporting period, regarding studies on issues related to EMP implementation, monitoring of work on site and etc., the CSC gave consultation during environmental audits since July to December inclusively. During audit process, the CSC instructed environmental specialists to pay the attention to the fixation of indicators of environmental measures implementation, and studied at work places to identify potential risks of negative environmental impact.
96. Health and Safety, Road Safety Engineers of the Contractor constantly control on site the compliance of safety measures and safe conduct of work, use of personal protective equipment. Information boards which show the main threats and risks at work places are installed in accommodations and rest rooms of base camp.
97. In September 2019, a lecture was held by the Prevention Department Head of the Atyrau AIDS Centre on the subject “Prevention of HIV/AIDS among the population” with the participation of the company's employees. During the reporting period, meetings were held that included issues related to the preparation of analytical safeguards reports, the identification and formulation of risks, and the preparation of corrective measures to eliminate negative impacts and non-conformances. A session on social and environmental standards is also included additionally. A press release of training and a list of participants are attached in Attachment 8.

## 5. SSEMP (SITE-SPECIFIC ENVIRONMENTAL MANAGEMENT PLAN) PROGRESS

### 5.1. SSEMP Review

98. Possible environmental impacts are identified for the construction stage in the EIA of this project, which are given in table 21 as verification indicators for proper tracking of the assigned tasks:

**Table 21: Information about EMP activities with the project EIA**

Types of possible impacts according to EIA	Objects and subjects of impact	Including activities to EMP			
		Lot 4	Lot 5	Lot 6	Lot 7
Wrong location of facilities (construction camps, excavation areas, borrow pits, storage places for materials and SW / production wastes and etc.)	Water quality, soil pollution, local communities	+	+	+	+
Dust condition and emissions	Local communities	+	+	+	+
Uncontrolled operation of water resources	Local communities	+	+	+	+
Poaching, extermination of birds and animals, rare and endangered plants	Regional flora and fauna	+	+	+	+
Violation of technical regulations during communication relocation	Local communities	+	+	+	+
Law violation if find out previously not identified archaeological and cultural values	Cultural and historical heritage, Local communities	+	+	+	+
Violation of safety and health issues of project affected person	Local communities Employees, involved in project construction works	+	+	+	+
EMP approval status	EMP and its attachment plans	3.03.19	26.05.19	20.05.19	23.05.18

99. As per the results of the second semi-annual report for 2018, the CSC prepared and issued a corrective action plan to eliminate non-conformances. There is information on implementation status of corrective actions at all sites in table 22 below.

**Table 22. Implementation Status of the Corrective Action Plan  
 for the period July-December 2019**

Activity	Deadline	Responsible	Expected result	Implementation status
Mobilization of key personnel for environmental safeguards on Lot 4 and Lot 5	July 2019	Contractor's Project manager	Agreed and approved candidate on the site with a permanent timetable on Lot 4	done
Regarding the Health and Safety Plan, to carry out activities and submit a report	August 2019	Environmental specialists Lot 4, Lot 5, Lot 6	Activity reports, photo reports and attendance list	done
To submit for approval to the CSC an independent laboratory for conducting IEM on Lot 4	July 2019	Environmental specialist	Agreement with a certified laboratory	done
To execute base line measurements on site Lot 4, Lot 5 IEM	July 2019	Environmental specialist	Measurement reports, IEM report	done
To submit IEM reports to the CSC on time	From July 2019	Environmental Specialists Lot 4, Lot 5, Lot 6 and Lot 7	IEM reports should be submitted by the 30th day of the IEM implementation month	done
To improve performance discipline of environmental specialists regarding report submission to CSC	Immediately	Site managers	Monthly report by the 5th day of the following month after the reporting period; quarterly report by the 10th day of the following month after the reporting period; semi-annual report by the 10th day of the following month after the reporting period.	done

## **6. ADVANCED METHODS AND OPPORTUNITIES FOR THEIR IMPROVEMENT**

### **6.1 Advanced methods (good practices)**

100. Interaction with external environment, which noted earlier in the third semi-annual report for 2019 as a good practice, has been used continuously by Lot 7. The Contractor has continued to be in good communication with local population, which allows to solve any problems in a short time. This practice is also used on Lot 6.
101. This practice has allowed the Grievance Mechanism to be proceed effectively on these sites. Appeals have not been recorded on Lot 7 and Lot 6. During the reporting period no complaints and appeals were registered on Lot 4, 5, 6 and 7.

### **6.2 Opportunities for improvement**

102. At the moment, such cases have not been identified for this construction project.

## 7 CONCLUSIONS AND RECOMMENDATIONS SUMMARY

### 7.1 Conclusions

103. Effective safeguard measures on the project should include the following:
- the best planning of construction works on Lot 7, which allowed the Contractor not to collect more numbers of equipment in small areas, especially at sensitive areas. Constant adjustment of water trucks timetable taking into account all factors affecting to dusting;
  - an organization chart of Lot 7 that allows the environment management system to work effectively. As a result, all work activities have been completed successfully.
  - trainings for staff conducted by the Contractor's environmental specialists on Lot 6 and Lot 5. On the subjects: waste segregation, response to environmental incidents like spills, crushing of septic tanks, pollution of water reservoirs and etc.
104. There is a same environmental specialist on Lot 5 and Lot 6, that is not an effective approach, it is only saving financial resources for staff salary. This combination has affected to submission time of IEM report.

### 7.2 Recommendations

105. Based on the monitoring of EMP implementation on the sites, the CSC prepared a corrective action plan. This plan is shown in table 23 below.

**Table 23. Corrective action plan for January-June 2020**

Activity	Deadline	Responsible	Expected result
To improve the quality of SSEMP / local environmental management plans / as instructed by the ADB consultant RETA.	January – March 2020	Manager of “Shanghai Construction Group”  Environmental specialist Lot 4	Compliance with the Safeguard Policy Statement ADB
Prepare the EMP for the additional section on the Construction of a bypass road in the village of Dossor, Makatsky district, Atyrau region	May 2020	Project manager, Ecologist Lot 7	Compliance with the ADB Safeguards Policy
To mobilize a key specialist for environmental safeguards on Lot 5	the first quarter of 2020	Manager of “Shanghai Construction Group”  Contractor Lot 5	Agreed and approved candidate on Lot 5 site with a permanent timetable

To improve fuel storage by organizing a containment zone and to increase the number of warning signs and instructions in the construction camp	January – March 2020	Manager of “Shanghai Construction Group”  Environmental specialist Lot 4	Compliance with the EMP and Environmental Code RK
To submit IEM reports/test reports to the CSC on time	January-June 2020	Environmental Specialists of Lot 4, Lot 5, Lot 6 and Lot 7	IEM reports should be submitted by the 30th day of the IEM implementation month
During the inspection the Contractor’s environmental specialist fills out checklists and submits it in the monthly reports	January-June 2020	Environmental Specialists of Lot 4, Lot 5, Lot 6  Site managers	Monthly report by the 5th day of the following month after the reporting period
Regarding the health and safety plan and improving sanitary and living conditions, to carry out activities and submit a report	January - February 2020	Environmental Specialists of Lot 4, Lot 5, Lot 6	Activity report, photo report

## **Attachments**

**Attachment 1**  
**Information on non-conformances on Lot 4, Lot 5, Lot 6 and Lot 7 sites**

No	Site/ Location	Regis- ter date	Category	Question description	Corrective action	No of non- conforman ce notice	Non- conforma nce level	Implement ation date	Prio- rity	Respon- sible	Status	Comm ents
1	Lot 4	31.10. 2019	Safety	There is no portable pallets under FLM tank	To provide the portable pallets for FLM tank	No.1	Substantial	01.12.2019	High	Safety and Road Safety specialist	closed	
2	Lot 4	31.10. 2019	Safety	There are no information signs and direction signs	To install an impervious fence and foundation, to place tanks for fuel with a capacity 110% of tank volume	No.2	Substantial	10.12.2019	High	Safety and Road Safety specialist	closed	
3	Lot 5	31.10. 2019	Environm ent protection	There was waste on the production base territory (used tires, steel bars, etc.)	it is necessary to arrange a place for temporary storage of production waste in accordance with the Sanitary rules of the RK	No.3	Substantial	12.11.2019	High	Environme ntal specialist Lot 5	closed	
4	Lot 5	31.10. 2019	Environm ent protection	There were spills on the territory of temporary FLM storage.	To concrete the territory of temporary FLM storage, to provide the portable pallets for FLM, to install warning information signs	No.4	Substantial	24.11.2019	High	Environme ntal specialist and Safety and Road Safety specialist	Closed for 50%, concreting not completed	Por- table pallets are being used

2nd Semi-Annual Environmental Monitoring Report for 2019

CAREC Corridors 1 & 6 Connector Road (Aktobe - Makat) Reconstruction Project (section km 330-504) / Contract 02-ADB/CSC-2017 (CSC-2)

5	Lot 5 and Lot 6	29.10.2019	Environment protection	insufficient dust control on site	To organize a sufficient watering on construction site	No.5	Substantial	05.11.2019	High	Environmental specialist Lot 5 and Lot 6	opened	
6	Lot 4	31.10.2019	Social and living conditions	In order to improve sanitary and living conditions the Contractor is recommended	To arrange a dryer room in laundry	No.6	Substantial	12.11.2019	High	Environmental specialist Lot 4	closed	
7					To enlarge eating place	No.7	Substantial	12.11.2019	High	Environmental specialist Lot 4	closed	
8					To divide eating place and dirty dishes place	No.8	Substantial	12.11.2019	High	Environmental specialist Lot 4	closed	
9					To install hangers in the canteen	No.9	Substantial	12.11.2019	High	Environmental specialist Lot 4	closed	
10					To arrange a place for storing outdoor clothes and shoes separately from a living area	No.10	Substantial	12.11.2019	High	Environmental specialist Lot 4	closed	
11	Lot 5		Social and living conditions		To install a lighting	No.11	Substantial	12.11.2019	High	Environmental specialist Lot 5	closed	
12					To arrange accommodations in compliance with the Sanitary Rules of the RK	No.12	Substantial	12.11.2019	High	Environmental specialist Lot 5	closed	

2nd Semi-Annual Environmental Monitoring Report for 2019

CAREC Corridors 1 & 6 Connector Road (Aktobe - Makat) Reconstruction Project (section km 330-504) / Contract 02-ADB/CSC-2017 (CSC-2)

13					To speed up installation process of heating system in camp facilities	No.13	Substantial	12.11.2019	High	Environmental specialist Lot 5	closed	
14					To supply a hot and cold water in accommodations	No.14	Substantial	12.11.2019	High	Environmental specialist Lot 5	closed	
15	Lot 6		Social and living conditions	It was noted the unbeautiful curtains in dormitories	It is recommended to install curtains	No.15	Substantial	05.11.2019		Environmental specialist Lot 6	closed	

Attachment 2

Licences for Borrow pits of Lot 5








### Attachment 3

#### Atmospheric air level measurement report details, Lot 4



**KZ.T.06.1234**  
TESTING

**Испытательная лаборатория ТОО «ЭкоНорматив»**  
 адрес: г.Атырау, ул.Қ.Сәтбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
 Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

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**ПРОТОКОЛ ИСПЫТАНИЙ № 431 от "30" 09 2019 г.** всего листов 1  
лист 1

**Наименование продукции:** Атмосферный воздух  
**Место отбора:** Площадка АБЗ объекта «Реконструкция автомобильной дороги Республиканского значения А-27 «Актобе-Атырау-граница РФ (на Астрахань)» участок км 330-370»  
**Заявитель: (наименование, адрес):** Фирма Шанхай Констракшн Групп Ко.,Лтд в Казахстане г.Нур-Султан, ул.Достык 18, офис 216  
**Акт отбора (измерения): (№ акта, дата, тип прибора)** № 536 от 25.09.2019 г. газоанализатор ГАНК-4  
**Дата поступления образцов:** 25.09.2019 г.  
**Дата проведения испытаний:** 25.09.2019 г.  
**Обозначение НД на продукцию:** ГН №168 от 28.02.2015г.  
**Виды испытаний:** Периодические



№ п.п.	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ													
			Температура воздуха, °С	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углев.С <sub>12</sub> -С <sub>25</sub>		Сероводород		Пыль неорг.	
								Факт., мг/м³	Норма по НД, мг/м³	Факт., мг/м³	Норма по НД, мг/м³	Факт., мг/м³	Норма по НД, мг/м³	Факт., мг/м³	Норма по НД, мг/м³	Факт., мг/м³	Норма по НД, мг/м³	Факт., мг/м³	Норма по НД, мг/м³	Факт., мг/м³	Норма по НД, мг/м³
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Террит. предпр-я	СТ РК 2.302-2014	26	766	СВ	2	31	0,733±0,01	5,0	0,0113	0,4	0,0118	0,2	0,0121	0,5	0,044	1	0,0010	0,008	0,0091	0,15
2	СЗЗ – Южная часть	СТ РК 2.302-2014	26	766	СВ	2	31	0,735±0,01	5,0	0,0115	0,4	0,0120	0,2	0,0124	0,5	0,046	1	0,0010	0,008	0,0093	0,15
3	СЗЗ – Юго-Западная часть	СТ РК 2.302-2014	26	766	СВ	2	31	0,737±0,01	5,0	0,0116	0,4	0,0122	0,2	0,0125	0,5	0,048	1	0,0012	0,008	0,0095	0,15
4	СЗЗ – Западная часть	СТ РК 2.302-2014	26	766	СВ	2	31	0,734±0,01	5,0	0,0114	0,4	0,0119	0,2	0,0122	0,5	0,046	1	0,0011	0,008	0,0092	0,15
5	СЗЗ – Северо-Восточная часть	СТ РК 2.302-2014	26	766	СВ	2	31	0,731±0,01	5,0	0,0110	0,4	0,0116	0,2	0,0120	0,5	0,042	1	0,0010	0,008	0,0088	0,15


Протокол распространяется только на образцы, подвергнутые испытаниям

Исполнитель: Сарсеналиев М.  
Ф.И.О.

Руководитель ИЛ: Соболев Л.  
Ф.И.О.

МП



Частичная перепечатка протокола испытаний без разрешения ТОО «ЭкоНорматив» запрещена



KZ.T.06.1234  
TESTING

Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г.Атырау, ул.Қ.Сәтбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 432 от "30" 09 2019 г.

всего листов 1  
лист 1

Наименование продукции:

Атмосферный воздух

Место отбора:

участок работ по объекту «Реконструкция автомобильной дороги Республиканского значения А-27 «Актобе-Атырау-граница РФ (на Астрахань)» участок км 330-370»

Заявитель: (наименование, адрес)

Филиал Шанхай Констракшн Груп Ко.,Лтд в Казахстане г.Нур-Султан, ул.Достык 18, офис 216

Акт отбора (измерения): (№ акта, дата, тип прибора)

№ 537 от 25.09.2019 г. газоанализатор ГАНК-4

Дата поступления образцов:

25.09.2019 г.

Дата проведения испытаний:

25.09.2019 г.

Обозначение НД на продукцию:

ГН №168 от 28.02.2015г.

Виды испытаний:

Периодические

№ п.п	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ													
			Температура воздуха, °C	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	CO		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углев.С <sub>12</sub> -С <sub>Н</sub>		Сероводород		Пыль неорг.	
								Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Карьер №1	СТ РК 2.302-2014	25	769	В	3	38	0,944±0,01	5,0	0,0113	0,4	0,0121	0,2	0,0127	0,5	0,031	1	0,0012	0,008	0,0068	0,15
2	Карьер №3	СТ РК 2.302-2014	25	768	В	2	41	0,731±0,01	5,0	0,0098	0,4	0,0081	0,2	0,0118	0,5	0,025	1	0,0010	0,008	0,0073	0,15
3	Карьер №6	СТ РК 2.302-2014	26	765	В	2	36	0,811±0,01	5,0	0,0110	0,4	0,0098	0,2	0,0068	0,5	0,029	1	0,0011	0,008	0,0071	0,15
4	Карьер №4	СТ РК 2.302-2014	26	767	В	2	37	0,772±0,01	5,0	0,0081	0,4	0,0073	0,2	0,0069	0,5	0,033	1	0,0012	0,008	0,0072	0,15
5	Карьер №5	СТ РК 2.302-2014	26	766	В	2	41	0,834±0,01	5,0	0,0071	0,4	0,0067	0,2	0,0059	0,5	0,029	1	0,0010	0,008	0,0069	0,15

Протокол распространяется только на образцы, подвергнутые испытаниям

Исполнители:

Сарсенгалиев М.  
Ф.И.О.

Руководитель ИЛ:

Соболев Д.  
Ф.И.О.

МП

Частичная перепечатка протокола испытаний без разрешения ТОО «ЭкоНорматив» запрещена



Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г.Атырау, ул.К.Сәтбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 433 от "30" 09 2019 г.

всего листов 1  
лист 1

Наименование продукции:

Атмосферный воздух

Место отбора:

участок работ по объекту «Реконструкция автомобильной дороги Республиканского значения А-27 «Актобе-Атырау-граница РФ (на Астрахань)» участок км 330-370»

Заявитель: (наименование, адрес)

Филиал Шанхай Констракшн Груп Ко.,Лтд в Казахстане г.Нур-Султан, ул.Достык 18, офис 216

Акт отбора (измерения): (№ акта, дата, тип прибора)

№ 538 от 25.09.2019 г. газоанализатор ГАНК-4

Дата поступления образцов:

25.09.2019 г.

Дата проведения испытаний:

25.09.2019 г.

Обозначение НД на продукцию:

ГН №168 от 28.02.2015г.

Виды испытаний:

Периодические

№ п.п.	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ													
			Температура воздуха, °С	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углев.С <sub>12</sub> -С <sub>18</sub>		Сероводород		Пыль неорг.	
								Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Участок реконстр.дороги	СТ РК 2.302-2014	24	767	В	2	31	0,931±0,01	5,0	0,0122	0,4	0,0117	0,2	0,0144	0,5	0,153	1	0,0012	0,008	0,0073	0,15
2	Участок строит.моста	СТ РК 2.302-2014	24	765	В	2	29	0,921±0,01	5,0	0,0119	0,4	0,0119	0,2	0,0134	0,5	0,108	1	0,0010	0,008	0,0065	0,15
3	Участок строит.моста	СТ РК 2.302-2014	24	766	В	2	28	0,948±0,01	5,0	0,0113	0,4	0,0110	0,2	0,0123	0,5	0,098	1	0,0011	0,008	0,0069	0,15
4	Карьер №6	СТ РК 2.302-2014	24	768	В	2	26	0,731±0,01	5,0	0,0095	0,4	0,0087	0,2	0,0087	0,5	0,051	1	0,0011	0,008	0,0072	0,15
5	Карьер №5	СТ РК 2.302-2014	23	766	В	2	27	0,891±0,01	5,0	0,0073	0,4	0,0091	0,2	0,0095	0,5	0,073	1	0,0010	0,008	0,0070	0,15
6	Карьер №4	СТ РК 2.302-2014	24	768	В	2	28	0,791±0,01	5,0	0,0068	0,4	0,0081	0,2	0,0071	0,5	0,051	1	0,0012	0,008	0,0073	0,15

Протокол распространяется только на образцы, подвергнутые испытаниям



Исполнитель:

Сарсенгалиев М.  
Ф.И.О.

Руководитель ИЛ:

Соболев Д.  
Ф.И.О.

МП

Частичная перепечатка протокола испытаний без разрешения ТОО «ЭкоНорматив» запрещена

Испытательная лаборатория  
 ТОО «ЭкоНорматив» г. Атырау, ул. К. Сәтбаев, д. 5, н.п. 5  
 тел/факс: 8 (7122) 210628 e-mail: ekonormativ@mail.ru  
 Аттестат аккредитации № KZ.И.06.1234 от 28.11.2016г.

Акт № 536

измерения атмосферного воздуха газоанализатором ГАНК-4

Заказчик (предприятие):

Ф. Шапкай Констр. Групп. Ко. АТД

Место измерения:

Терр. пришил. (10Т4) АБЗ (330-370 км)

Дата и время измерения:

25.09.19г

Обозначение НД на метод измерения:

СТ РК 2.302-2014, ГОСТ 17.2.3.01-86, ГОСТ 17.2.6.02-85, ГОСТ 12.1.005-88

№ п/п	Точка отбора проб	Метеорологические характеристики атмосферы					Концентрация загрязняющих веществ, мг/м³						
		Температура воздуха, °C	Атмосферное давление, гПа	Направление ветра	Скорость ветра, м/с	Влажность, %	CO	NO	NO <sub>2</sub>	SO <sub>2</sub>	Углек. C <sub>12</sub> -C <sub>14</sub>	H <sub>2</sub> S	ионы неорг.
1	Терр. пришил. (10Т4)	26	1022	СВ	2	31	0,733	0,0113	0,0118	0,0121	0,044	0,0010	0,0091
2	Южная часть СЗЗ	26	1022	СВ	2	31	0,735	0,0115	0,0120	0,0124	0,046	0,0010	0,0093
3	Ю-Западная часть СЗЗ	26	1022	СВ	2	31	0,737	0,0116	0,0122	0,0125	0,048	0,0012	0,0095
4	Западная часть СЗЗ	26	1022	СВ	2	31	0,734	0,0114	0,0119	0,0122	0,046	0,0011	0,0092
5	С-Вост. часть СЗЗ	26	1022	СВ	2	31	0,731	0,0110	0,0116	0,0120	0,042	0,0010	0,0088

Измерения произвел (Исполнитель):

Сарсенгашиев М

Ф.И.О., должность

Руководитель ИЛ:

Соболев Д

Ф.И.О.

Представитель

Предприятия (Заказчик):

Сарсенгашиев МБ

Ф.И.О., должность

Подпись  
 Подпись  
 Подпись



Испытательная лаборатория  
 ТОО «ЭкоНорматив» г.Атырау, ул.Қ.Сәтбаев, д.5, н.п.5  
 тел/факс: 8 (7122) 210628 e-mail: [ekonormativ@mail.ru](mailto:ekonormativ@mail.ru)  
 Аттестат аккредитации № KZ.Н.06.1234 от 28.11.2016г.

Акт № 537

измерения атмосферного воздуха газоанализатором ГАНК-4

Заказчик (предприятие):

Ф. Шапхан Констр. групп. Ко. ИТД

Место измерения:

Терр. градоохр. (ИТД) Карьер

Дата и время измерения:

25.09.19г.

Обозначение НД на метод измерения:

СТ РК 2.302-2014, ГОСТ 17.2.3.01-86, ГОСТ 17.2.6.02-85, ГОСТ 12.1.005-88

№ п/п	Точка отбора проб	Метеорологические характеристики атмосферы					Концентрация загрязняющих веществ, мг/м³						
		Температура воздуха, °C	Атмосферное давление, гПа	Направление ветра	Скорость ветра, м/с	Влажность, %	CO	NO	NO <sub>2</sub>	SO <sub>2</sub>	У <sub>исп</sub> C <sub>12</sub> -C <sub>19</sub>	У <sub>2</sub> S	иные неорг.
1	Карьер N1	25	1026	В	3	38	0,944	0,0113	0,0121	0,0127	0,031	0,0012	0,0068
2	Карьер N3	25	1024	В	2	41	0,731	0,0098	0,0081	0,0118	0,025	0,0010	0,0073
3	Карьер N6	26	1021	В	2	36	0,811	0,0110	0,0098	0,0068	0,029	0,0011	0,0071
4	Карьер N4	26	1023	В	2	37	0,772	0,0081	0,0073	0,0069	0,033	0,0012	0,0072
5	Карьер N5	26	1022	В	2	41	0,834	0,0071	0,0067	0,0059	0,029	0,0010	0,0069

Измерения произвел (Исполнитель):

Сарсенгашиев М

Ф.И.О., должность

Руководитель ИЛ:

Соболев Д

Ф.И.О.

Представитель

Предприятия (Заказчик):

Сарсенгашиев М.С.

Ф.И.О., должность

С

подпись

С

подпись

С

подпись

Испытательная лаборатория  
 ТОО «ЭкоНорматив» г. Атырау, ул. Қ. Сәтбаев, д. 5, н.п. 5  
 тел/факс: 8 (7122) 210628 e-mail: ekonormativ@mail.ru  
 Аттестат аккредитации № KZ.И.06.1234 от 28.11.2016г.

Акт № 538  
 измерения атмосферного воздуха газоанализатором ГАНК-4

Заказчик (предприятие):

Ф. «Шаукай Констр. Учшт Ко АТД»

Место измерения:

Терр. мост (1074) Реконстр. дорог

Дата и время измерения:

25.09.19г.

Обозначение НД на метод измерения:

СТ РК 2.302-2014, ГОСТ 17.2.3.01-86, ГОСТ 17.2.6.02-85, ГОСТ 12.1.005-88

№ п/п	Точка отбора проб	Метеорологические характеристики атмосферы					Концентрация загрязняющих веществ, мг/м³						
		Температура воздуха, °C	Атмосферное давление, гПа	Направление ветра	Скорость ветра, м/с	Влажность, %	CO	NO	NO <sub>2</sub>	SO <sub>2</sub>	Умел C <sub>12</sub> -C <sub>19</sub>	H <sub>2</sub> S	иные неэф?
5	Реконстр. дорог	24	1023	В	2	31	0,931	0,0122	0,0117	0,0144	0,153	0,0012	0,0073
7	Строит. моста	24	1021	В	2	29	0,921	0,0119	0,0119	0,0134	0,108	0,0010	0,0065
8	Строит. моста	24	1022	В	2	28	0,948	0,0113	0,0110	0,0123	0,098	0,0011	0,0069
9	Карьер №6	24	1024	В	2	26	0,731	0,0095	0,0087	0,0087	0,051	0,0011	0,0072
10	Карьер №5	23	1022	В	2	27	0,891	0,0073	0,0091	0,0095	0,073	0,0010	0,0070
11	Карьер №4	24	1024	В	2	28	0,791	0,0068	0,0081	0,0071	0,051	0,0012	0,0073

Измерения произвел (Исполнитель):

Сарсенгалин М.  
Ф.И.О., должность

Руководитель ИЛ:

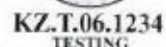
Соболев Д.  
Ф.И.О.

Представитель

Предприятия (Заказчик):

Сарбалин М.  
Ф.И.О., должностьС.  
подписьС.  
подписьС.  
подпись

подпись



Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г.Атырау, ул.К.Сәтбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

всего листов 1  
лист 1

Атмосферный воздух

Площадка АБЗ объекта «Реконструкция автомобильной дороги Республиканского значения А-27 «Актобе-Атырау-граница РФ (на Астрахань)» участок км 330-370» ЛОТ4

Филиал Шанхай Констракшн Груп Ко.,Лтд в Казахстане г.Нур-Султан, ул.Достык 18, офис 216

№ 678 от 20.11.2019 г. газоанализатор ГАНК-4

20.11.2019 г.

20.11.2019 г.

ГН №168 от 28.02.2015г.

Периодические

№ п.п.	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ													
			Температура воздуха, °С	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углер. C <sub>12</sub> -C <sub>18</sub>		Сероводорода		Пыль и орг.	
								Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Террит. предель-я	ГОСТ 12 1 005-88, СТ	-10	766	С	3	47	0,858±0,01	5,0	0,0093	0,4	0,0088	0,2	0,0121	0,5	0,048	1	0,0012	0,008	0,0073	0,15
2	СЗЗ – Юго-Восточная часть	РК 2 302-2014, МИ-	-10	766	С	3	47	0,859±0,01	5,0	0,0095	0,4	0,0091	0,2	0,0124	0,5	0,052	1	0,0012	0,008	0,0078	0,15
3	СЗЗ – Южная часть	4215-013-56591-409-	-10	766	С	3	47	0,861±0,01	5,0	0,0097	0,4	0,0093	0,2	0,0125	0,5	0,054	1	0,0013	0,008	0,0084	0,15
4	СЗЗ – Юго- Западная часть	2010, МВН-4215-004А-	-10	766	С	3	47	0,858±0,01	5,0	0,0094	0,4	0,0089	0,2	0,0122	0,5	0,049	1	0,0011	0,008	0,0075	0,15
5	СЗЗ – Северная часть	56591409-2012	-10	766	С	3	47	0,855±0,01	5,0	0,0091	0,4	0,0086	0,2	0,0118	0,5	0,046	1	0,0011	0,008	0,0071	0,15

Протокол распространяется только на образцы, подвергнутые испытанию



Спренгелия М.

Соболев Д.

MIT

Частичная перепечатка протокола испытаний без разрешения ТОО «ЭкоНорматив» запрещена



**Испытательная лаборатория ТОО «ЭкоНорматив»**  
адрес: г.Атырау, ул.Қ.Сәтбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

**ПРОТОКОЛ ИСПЫТАНИЙ № 548** от "09" 12 2019 г.

всего листов 1  
лист 1

**Наименование продукции:**

Атмосферный воздух

**Место отбора:**

Участки объекта «Реконструкция автомобильной дороги Республиканского значения А-27

«Актобе-Атырау-граница РФ (на Астрахань)» участок км 330-370» ЛОТ4

**Заявитель: (наименование, адрес)**

Филиал Шанхай Констракшн Груп Ко.,Лтд в Казахстане г.Нур-Султан, ул.Достык 18, офис 216

**Акт отбора (измерения): (№ акта, дата, тип прибора)**

№ 679 от 20.11.2019 г. газоанализатор ГАНК-4

**Дата поступления образцов:**

20.11.2019 г.

**Дата проведения испытаний:**

20.11.2019 г.

**Обозначение НД на продукцию:**

ГН №168 от 28.02.2015г.

**Виды испытаний:**

Периодические

№ п.п	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ, мг/м³													
			Температура воздуха, °С	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углев. С <sub>12</sub> -С <sub>19</sub>		Сероводород		Пыль неорг.	
								Факт	Норма по НД	Факт	Норма по НД	Факт	Норма по НД	Факт	Норма по НД	Факт	Норма по НД	Факт	Норма по НД	Факт	Норма по НД
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Уч. реконстр. дороги	ГОСТ 12.1.005-88, СТ РК 2.302-2014, МИ-4215-013-56591409-2010, МВИ-4215-004А-56591409-2012	-10	767	С	2	51	0,861±0,01	5,0	0,0089	0,4	0,0075	0,2	0,0112	0,5	0,033	1	0,0010	0,008	0,0089	0,15
2	Уч. строит.моста р.Салыз		-10	765	С	2	53	0,843±0,01	5,0	0,0073	0,4	0,0071	0,2	0,0121	0,5	0,041	1	0,0012	0,008	0,0079	0,15
3	Уч. строит.моста р.Ногайты		-10	767	С	2	50	0,871±0,01	5,0	0,0068	0,4	0,0073	0,2	0,0119	0,5	0,037	1	0,0011	0,008	0,0077	0,15

Протокол распространяется только на образцы, подвергнутые испытаниям



Исполнители:

Сарсенгалиев М.

Ф.И.О.

Руководитель ИЛ:

Соболев Д.

Ф.И.О.

МП

*Подпись*  
подпись  
*Подпись*  
подпись

Частичная перепечатка протокола испытаний без разрешения ТОО «ЭкоНорматив» запрещена

#### Attachment 4. Noise and Vibration level measurement report details, Lot 4

<p>ҚР Денсаулық сақтау министрлігі Министрлер кабинеті Министрлер кабинетінің Ішкі</p>	<p>Нысаншыл ЕҚСЖ бойынша жолы _____          Код формасы по ОКУД _____          ЕҚСЖ бойынша ұйым жолы _____          Код организации по ОКПО _____</p>
<p>Тығандырылған мәліметтердің қысқартылған нұсқасы мен          құпиялығын басқару комитетінің «Ұлттық сапаттағы          орталығы» ШҚК РМҚ-ның Атырау облысы бойынша          филиалының Қазақстан Республикасы бойынша          Қызылорда облысының филиалы РТІ          на ПХВ «Нашконовый центр экспертизы» Комитета          контроля качества и безопасности товаров и услуг          Министерства здравоохранения РК по Атырауской          области</p>	<p>Қазақстан Республикасы          Ұлттық экономикалық сақтау министрлігінің 2015 жылғы          «30» мамырдағы №415 Бұйрығымен бекітілген          №133/е тізімдегі медициналық құжаттама          Медициналық документация          Форма 133/у          Утверждена приказом Министра национальной          экономики Республики Казахстан от 30-мая 2015 года          №415</p>
<p>Діріл деңгейлерін оқымауы          ХАТТАМАСЫ          ПРОТОКОЛ          измерения уровня вибрации          № 7          (от) « 25 » 09 2019 ж. (г.)</p>	

1. Насыпым топыз, ягузы, мезгелжасы (Полное наименование производящего объекта, адрес) \_\_\_\_\_ Физлицы  
Шанхай Констракшн Груп Ко., Лтд. Атырау қаласындағы филиалы Қытайлық ағудыңдағы Салғы  
селосында Ақтөбе-Атырау А-27 км 310-370 аралығы Автожолы жоғ. зертханасы  
шең. учаске (кең. учаске)  
2. Өлшеу мінсаты (Цель измерения) \_\_\_\_\_ Келісім шарт бойынша (догвор) №38 02.09.2019г  
3. Өлшеулер нысан өкілдерінің қатысуымен жүргізілді (Өлшеу) \_\_\_\_\_ Проводились в присутствии представителя  
объекта) \_\_\_\_\_ Еке әкелер Муса А.  
4. Өлшеу құралдары (Средства измерения) \_\_\_\_\_ Шумомер (аппарат) №10  
(Атырау, түрі, нөмірталары көмірі (наименование, тип, идентификация нөмірі)  
5. Мемонеттік тексеру туралы мәліметтер (Сведения о государственной поверке) \_\_\_\_\_ дв № \_\_\_\_\_ СС-15-000001146  
12.09.2019г(г)  
(Берген күні жөн құралдары көмірі (Дата и номер государственной поверки)  
6. Мөлшері (Объем) \_\_\_\_\_  
7. Топтама саны (Номер партии) \_\_\_\_\_  
8. Өндірілген мерзімі (Дата выработки) \_\_\_\_\_

9. Жүргізілген өлшемдер мен берілген санитарлық-эпидемиологиялық қорытынды мына НҚ-ға сай жүргізілді (НҚ, в соответствии с которой проводилось исследование). Берілген санитарлық-эпидемиологиялық және гигиеналық талаптар ҚО мемлекеті бастапқы санитарлық-эпидемиологиялық қауіпсіздік бағамына (Служба санитарно-эпидемиологической и гигиенической профилактики здоровья) Ута, Республика Коммун Танагокиа сияқты 18 жана 2016/06/02 №299

10. Негізгі айғақ көздері мен олар туыратын бірізділік сыпаты (Основные источники возбуждения и характер создаваемой вибрации) -

1) Жұмыс істейтін адамдардың саны (Количество работающих человек) 1

[illegible]

Бет (стр) 1  
Барлығы (барлығы) 4

[illegible]

CAREC Corridors 1 & 6 Connector Road (Aktobe - Makat) Reconstruction Project (section km 330-504) / Contract 02-ADB/CSC-2017 (CSC-2)

CAREC Corridors 1 & 6 Connector Road (Aktobe - Makat) Reconstruction Project (section km 330-504) / Contract 02-ADB/CSC-2017 (CSC-2)

[illegible]

Бет (стр) 3  
Барлығы (всего) 4

# 2nd Semi-Annual Environmental Monitoring Report for 2019

CAREC Corridors 1 & 6 Connector Road (Aktobe - Makat) Reconstruction Project (section km 330-504) / Contract 02-ADB/CSC-2017 (CSC-2)

## Өлшеулер нәтижелері (Результаты измерений)

Тіркеу нөмірі Регистранттың нөмірі		Көрсеткіш бойынша нүкте нөмірі		Өлшеу орны (жабдықтың маркасы, түрі, құжат деректері көрсетілген) Место замер/указать марку, тип, паспортные данные оборудования		Косыла малыметтер (өлшеу жағдайлары, шудың (дәрірінің) жұмыс кезіндегі өсерінің ұзықтығы) (Дополнительные сведения (условия замера, продолжительность воздействия шума (вибрации) в течение рабочей смены)		Спектр Бойынша По спектру		Спектр Бойынша По спектру		Октавалық жолақта дБ-мен ортаметрілік жаңа Гц-пен берілген дыбыс қысымының деңгейлері (дәріл ұлсуының немесе дәріл жылдамдығының деңгейі) Уровни звукового давления (уровни виброускорения или виброскорости) в дБ октавных полосах со среднеметрическими частотами в Гц										ДБА-мен берілген дыбыс деңгейлері (дыбыстың эквивалентті деңгейі), дБ-мен берілген дәрілдің түзілген (түзілген эквивалентті) деңгей Уровни звука (эквивалентный уровень звука) дБА, корректисированный		Рұқсат етілген (норма бойынша дБА шу үшін немесе дБ дәріл үшін) Допустимое (дБА-да шума или дБ для вибрации по норме)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Бетон және шөбин зертханасы (Бетонная лаборатория)																									
	X №1 -3	Вытяжной шкаф		+				+																45	60
	X №4	Зертханада орналасқан термостат		+				+																40	60
	X №5	Зертханада орналасқан термостат		+				+																40	60

## Attachment 5. Radiation background level measurement report details, Lot 4

  
KZ.T.06.1234  
TESTING

Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г.Атырау, ул.К.Сәтбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 90 от "30" 09. 2019 г. всего листов 1 лист 1

Наименование продукции: радиационный фон  
Место отбора: участок работ на объекте «Реконструкция автомобильной дороги Республиканского значения А-27 «Актобе-Атырау-граница РФ (на Астрахань)» участок км 330-370»  
Заявитель: (наименование, адрес) Филлал Шанхай Констракшн Групп Ко., Лтд в Казахстане  
г.Нур-Султан, ул.Достык 18, офис 216  
Акт отбора (измерения) (№ акта, дата, тип прибора): № 539 от 25.09.2019г.  
радиометр-дозиметр РКС-01Г СОЛЮ

Дата поступления образцов: 25.09.2019г.  
Дата проведения испытаний: 25.09.2019г.  
Обозначение НД на продукцию: «Сан-эпидем. требования к обеспечению радиационной безопасности» от 27 февраля 2015 года № 155  
Виды испытаний: Периодические

№ п.п.	Наименование точек измерений	НД на метод испытаний	Наименование измеренного параметра	
			Фактическое значение, мкЗв/час	Нормы по НД, мкЗв/час
1	2	3	4	5
1	Территория площадки АБЗ	ГОСТ Р МЭК 1066-93	0,034-0,051	не более 0,20
2	Участок реконструкции дороги	ГОСТ Р МЭК 1066-93	0,042-0,048	не более 0,20
3	Территория карьера №1	ГОСТ Р МЭК 1066-93	0,031-0,042	не более 0,20
4	Территория карьера №3	ГОСТ Р МЭК 1066-93	0,028-0,037	не более 0,20
5	Территория карьера №6	ГОСТ Р МЭК 1066-93	0,030-0,038	не более 0,20
6	Территория карьера №4	ГОСТ Р МЭК 1066-93	0,037-0,043	не более 0,20
7	Территория карьера №5	ГОСТ Р МЭК 1066-93	0,029-0,036	не более 0,20

Протокол распространяется только на образцы, подвергнутые испытанию

  
Руководитель ИЛ: Соболев Д.  
Ф.И.О.

Испытательная лаборатория  
ТОО «ЭкоНорматив» г.Атырау, ул.К.Сәтбаев, д.5, н.п.5  
тел/факс: 8 (7122) 210628 e-mail: ekonormativ@mail.ru  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

Акт № 539  
радиационного измерения радиометр-дозиметром РКС-01Г-СОЛЮ

Заказчик (предприятие): Ф. Шанхай Констр Групп Ко ЛТД.

Площадь отбора пробы: Терр. участок (1074) (330-370)

Дата и время измерения: 25.09.19г.

Обозначение НД на метод измерения: ГОСТ Р МЭК 1066-93

№ п/п	Место измерения	Мощность эквивалентной дозы гамма-излучения, мкЗв/час
1	Терр. участка АБЗ	0,034 - 0,051
2	Терр. участка реконстр. дороги	0,042 - 0,048
3	Терр. участка карьера №1	0,031 - 0,042
4	Терр. участка карьера №3	0,028 - 0,037
5	Терр. участка карьера №6	0,030 - 0,038
6	Терр. участка карьера №4	0,037 - 0,043
7	Терр. участка карьера №5	0,029 - 0,036

Измерения произвел (Исполнитель)   
Ф.И.О., должность

Представитель Предприятия (Заказчик)   
Ф.И.О., должность

  
подпись

  
подпись

2nd Semi-Annual Environmental Monitoring Report for 2019

CAREC Corridors 1 & 6 Connector Road (Aktobe - Makat) Reconstruction Project (section km 330-504) / Contract 02-ADB/CSC-2017 (CSC-2)

Независимая лаборатория  
 ТОО «ЭкоИнформатик» г. Алматы, мкр. Алашарда-4, д.5, №39  
 телефон: 8(7122) 305536, 310628 E-mail: ekoinformatik@mail.kz  
 Аттестат аккредитации № KZ.H.06.1234 от 28.11.2016г.

Акт № 540  
 отбора проб воды

Заказчик (предприятие): Ф. Шанкеев Канат Сергеевич КО АТД  
 Наименование объекта: Фонд Шанкеев (А074)  
 Дата отбора проб: 25.09.19г.  
 ИД на отбор проб: СТ РК 1502-2003  
 Вид пробы: поверхностная  
 Тип емкости, в которую помещена проба: СРБ-100  
 Тип пробы воды: поверхностная  
 Методы консервации: холодильная  
 Оборудование использованное для отбора проб: гидрофобизатор

№	Время отбора проб	Место отбора проб	Объем пробы, л	Температура, °С
1	15.40	р. Сайын	1	12
2	16.05	р. Мотылтау	1	12

вид, цвет, запах, вкус (нефтепродукты), привкус, распространение по территории участка

Сбор проб (Исполнитель): Сараева А. С.  
 Подпись (Подтверждение Заказчика): Сараева А. С.

## Attachment 6. Atmospheric air level measurement report, Lot 5



Испытательная лаборатория ТОО «ЭкоНорматив»  
 адрес: г.Атырау, ул.К.Сәтбаев, д.5, п.п.5, тел.: 8(7122) 21-06-28  
 Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 439 от "30" 09 2019 г.

всего листов 1  
 лист 1

Наименование продукции:  
 Место отбора:

Атмосферный воздух  
 Платформа АБЗ объекта «Реконструкция автомобильной дороги Республиканского значения А-27 «Актобе-Атырау-граница РФ (на Астрахань)» участок км 370-418»  
 ТОО «Ақ жол құрылыс» г.Ақтау, Промзона №9, зд.43  
 № 548-2 от 26.09.2019 г. газоанализатор ГАНК-4  
 26.09.2019 г.  
 26.09.2019 г.  
 ГИ №168 от 28.02.2015г.  
 Периодические

Заявитель: (наименование, адрес)  
 Акт отбора (измерения): (№ акта, дата, тип прибора)  
 Дата поступления образцов:  
 Дата проведения испытаний:  
 Обозначение НД на продукцию:  
 Виды испытаний:

№ п/п	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ													
			Температура воздуха, °C	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углек. С <sub>12</sub> -С <sub>12</sub>		Сероводород		Пыль испр.	
								факт, мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	факт, мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	факт, мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	факт, мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	факт, мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	факт, мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	факт, мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>
1	Тереза-предвар.	СТ РК 2.302-2014	27	765	В	3	47	0.751±0.01	5.0	0.0122	0.4	0.0119	0.2	0.0142	0.5	0.036	1	0.0011	0.008	0.0084	0.15
2	С33 – Юго-Западная часть	СТ РК 2.302-2014	27	765	В	3	47	0.752±0.01	5.0	0.0124	0.4	0.0119	0.2	0.0146	0.5	0.038	1	0.0012	0.008	0.0088	0.15
3	С33 – Западная часть	СТ РК 2.302-2014	27	765	В	3	47	0.755±0.01	5.0	0.0127	0.4	0.0122	0.2	0.0148	0.5	0.041	1	0.0013	0.008	0.0091	0.15
4	С33 – Северо-Западная часть	СТ РК 2.302-2014	27	765	В	3	47	0.753±0.01	5.0	0.0122	0.4	0.0120	0.2	0.0145	0.5	0.037	1	0.0011	0.008	0.0086	0.15
5	С33 – Восточная часть	СТ РК 2.302-2014	27	765	В	3	47	0.750±0.01	5.0	0.0122	0.4	0.0117	0.2	0.0141	0.5	0.035	1	0.0011	0.008	0.0081	0.15

Протокол распространяется только на образцы, подвергнутые испытаниям



Исполнитель: Тарасова М.  
 Руководитель ИЛ: Габдуллин Д.  
 МП

*(Signature)*  
*(Signature)*

Частичное перекачка протокола испытаний без разрешения ТОО «ЭкоНорматив» запрещена



**Испытательная лаборатория ТОО «ЭкоНорматив»**  
адрес: г.Атырау, ул.К.Согбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

всего листов	1
лист	1

Участки работ для объекта «Реконструкция автомобильной дороги Республиканского значения А-37 «Ашхабад-Атырау-граница РФ (на Астрахань)» участок км 370-418»

ТОО «Ак жол кумысы» г. Актау, Промзона №9, зд. 43

№ 548-3 от 26.09.2019 г. газоанализатор ГАНК-4

26.09.2019 г.

26.09.2019 г.

ГН №168 от 28.02.2015г.

Периодические

Виды испытаний:		Периодические						Содержание загрязняющих веществ													
№ п/п	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ													
			Температура воздуха, °С	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углерод C <sub>12</sub> -C <sub>10</sub>		Сероводород		Пыль неорг.	
								Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Участок карьера	СТ РК 2.302-2014	27	765	В	2	32	0,704±0,01	5,0	0,0087	0,4	0,0088	0,2	0,0121	0,5	0,039	1	0,0012	0,008	0,0084	0,15
2	Участок реконстр. дороги	СТ РК 2.302-2014	27	768	В	2	37	0,834±0,01	5,0	0,0099	0,4	0,0087	0,2	0,0094	0,5	0,048	1	0,0011	0,008	0,0077	0,15

Против распространения только на образцы, подвергнутые испытаниям



Сорокин М.  
ИИИ

События  $A$ 

Частичная перепечатка протокола испытаний без разрешения ЦОЭ «ЭкоИнформатика» запрещена

## 2nd Semi-Annual Environmental Monitoring Report for 2019

CAREC Corridors 1 & 6 Connector Road (Aktobe - Makat) Reconstruction Project (section km 330-504) / Contract 02-ADB/CSC-2017 (CSC-2)



KZ.T.06.1234  
TESTING

Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г.Атырау, ул.Қ.Сәтбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 551 от "09" 12 2019 г.

всего листов 1  
лист 1

Наименование продукции:

Атмосферный воздух

Место отбора:

Площадка карьера для объекта «Реконструкция автомобильной дороги Республиканского значения А-27 «Актобе-Атырау-граница РФ (на Астрахань)» участок км 370-418»

Заявитель: (наименование, адрес)

ТОО «Ақ жол құрылыс» г.Ақтау, Промзона №9, зд.43

Акт отбора (измерения): (№ акта, дата, тип прибора)

№ 686 от 20.11.2019 г. газоанализатор ГАНК-4

Дата поступления образцов:

20.11.2019 г.

Дата проведения испытаний:

20.11.2019 г.

Обозначение НД на продукцию:

ГН №168 от 28.02.2015г.

Виды испытаний:

Периодические

№ п.п	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ													
			Температура воздуха, °С	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углев. С <sub>12</sub> -С <sub>18</sub>		Сероводород		Пыль неорг.	
								Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Территория карьера	ГОСТ 12.1.005-88, СТ	-8	767	С	2	46	0,941±0,01	5,0	0,0073	0,4	0,0068	0,2	0,0091	0,5	0,054	1	0,0011	0,008	0,0083	0,15
2	СЗЗ – Юго-Восточная часть	РК 2.302-2014, МИ-	-8	767	С	2	46	0,947±0,01	5,0	0,0076	0,4	0,0072	0,2	0,0094	0,5	0,059	1	0,0012	0,008	0,0084	0,15
3	СЗЗ – Южная часть	4215-013-56591409-	-8	767	С	2	46	0,951±0,01	5,0	0,0078	0,4	0,0074	0,2	0,0096	0,5	0,061	1	0,0013	0,008	0,0085	0,15
4	СЗЗ – Юго-Западная часть	2010, МВИ-4215-004А-	-8	767	С	2	46	0,944±0,01	5,0	0,0074	0,4	0,0069	0,2	0,0092	0,5	0,057	1	0,0011	0,008	0,0083	0,15
5	СЗЗ – Северная часть	56591409-2012	-8	767	С	2	46	0,941±0,01	5,0	0,0070	0,4	0,0066	0,2	0,0088	0,5	0,052	1	0,0010	0,008	0,0081	0,15

Протокол распространяется только на образцы, подвергнутые испытаниям



Исполнитель: Сарсеналиев М.

Ф.И.О.

Руководитель: Соболев Л.

Ф.И.О.

Частичная перепечатка протокола испытаний без разрешения ТОО «ЭкоНорматив» запрещается

KZ.T.06.1234  
TESTING

Испытательная лаборатория ТОО «ЭкоНорматив»

адрес: г.Атырау, ул.К.Сәтбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28

Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 551 от "09" 12 2019 г.

всего листов 1

лист 1

Наименование продукции:

Атмосферный воздух

Место отбора:

Площадка карьера для объекта «Реконструкция автомобильной дороги Республиканского значения А-27 «Актобе-Атырау-граница РФ (на Астрахань)» участок км 370-418»

Заявитель: (наименование, адрес)

ТОО «Ақ жол құрылыс» г.Ақтау, Промзона №9, зд.43

Акт отбора (измерения): (№ акта, дата, тип прибора)

№ 686 от 20.11.2019 г. газоанализатор ГАНК-4

Дата поступления образцов:

20.11.2019 г.

Дата проведения испытаний:

20.11.2019 г.

Обозначение НД на продукцию:

ГН №168 от 28.02.2015г.

Виды испытаний:

Периодические

№ п.п	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ													
			Температура воздуха, °С	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углев.С <sub>10</sub> -С <sub>19</sub>		Сероводород		Пыль неорг.	
								Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Территория карьера	ГОСТ 12.1.005-88, СТ	-8	767	С	2	46	0,941±0,01	5,0	0,0073	0,4	0,0068	0,2	0,0091	0,5	0,054	1	0,0011	0,008	0,0083	0,15
2	СЗ3 – Юго-Восточная часть	РК 2.302-2014, МИ-4215-013-56591409-	-8	767	С	2	46	0,947±0,01	5,0	0,0076	0,4	0,0072	0,2	0,0094	0,5	0,059	1	0,0012	0,008	0,0084	0,15
3	СЗ3 – Южная часть	2010, МВИ-4215-004А-	-8	767	С	2	46	0,951±0,01	5,0	0,0078	0,4	0,0074	0,2	0,0096	0,5	0,061	1	0,0013	0,008	0,0085	0,15
4	СЗ3 – Юго-Западная часть	56591409-2012	-8	767	С	2	46	0,944±0,01	5,0	0,0074	0,4	0,0069	0,2	0,0092	0,5	0,057	1	0,0011	0,008	0,0083	0,15
5	СЗ3 – Северная часть		-8	767	С	2	46	0,941±0,01	5,0	0,0070	0,4	0,0066	0,2	0,0088	0,5	0,052	1	0,0010	0,008	0,0081	0,15

Протокол распространяется только на образцы, подвергнутые испытаниям

Исполнитель:

Сарсенгалиев М.  
Ф.И.О.

Руководитель ИЛ

Соболев Д.  
Ф.И.О.

МП

Частичная перепечатка протокола испытаний без разрешения ТОО «ЭкоНорматив» запрещена

## Attachment 7. Atmospheric air level measurement report, Lot 6



Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г.Атырау, ул.Қ.Сәтбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 436 от "30" 09 2019 г.

всего листов 1  
лист 1

Наименование продукции:  
Место отбора:

Атмосферный воздух  
Площадка АБЗ объекта «Реконструкция автомобильной дороги Республиканского значения А-27 «Актобе-Атырау-граница РФ (на Астрахань)» участок км 418-458»  
ТОО «Ак жол құрылыс» г.Актау, Промзона №9, зд.43  
№ 542 от 26.09.2019 г. газоанализатор ГАНК-4  
26.09.2019 г.  
26.09.2019 г.  
ГН №168 от 28.02.2015г.  
Периодические

Заявитель: (наименование, адрес)

Акт отбора (измерения): (№ акта, дата, тип прибора)

Дата поступления образцов:

Дата проведения испытаний:

Обозначение НД на продукцию:

Виды испытаний:

Виды испытаний:		Периодические																			
№ п.п.	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ													
			Температура воздуха, °С	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углев. C <sub>12</sub> -C <sub>18</sub>		Сероводород		Пыль неорг.	
								Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Террит. предпр-я	СТ РК 2.302-2014	27	765	СВ	3	22	0,821±0,01	5,0	0,0093	0,4	0,0110	0,2	0,0121	0,5	0,057	1	0,0010	0,008	0,0091	0,15
2	СЗЗ – Южная часть	СТ РК 2.302-2014	27	765	СВ	3	22	0,823±0,01	5,0	0,0094	0,4	0,0112	0,2	0,0123	0,5	0,060	1	0,0011	0,008	0,0092	0,15
3	СЗЗ – Юго-Западная часть	СТ РК 2.302-2014	27	765	СВ	3	22	0,824±0,01	5,0	0,0095	0,4	0,0114	0,2	0,0126	0,5	0,061	1	0,0012	0,008	0,0094	0,15
4	СЗЗ – Западная часть	СТ РК 2.302-2014	27	765	СВ	3	22	0,822±0,01	5,0	0,0093	0,4	0,0111	0,2	0,0122	0,5	0,059	1	0,0011	0,008	0,0092	0,15
5	СЗЗ – Северо-Восточная часть	СТ РК 2.302-2014	27	765	СВ	3	22	0,819±0,01	5,0	0,0091	0,4	0,0110	0,2	0,0119	0,5	0,056	1	0,0010	0,008	0,0090	0,15

Протокол распространяется только на образцы, подвергнутые испытаниям

Исполнители:

Степанов М.

Руководитель ИЛ:

Доброволь Д.

МП

Частичная переписка протокола испытаний без разрешения ТОО «ЭкоНорматив» запрещена



Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г.Атырау, ул.К.Сәтбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 438 от "30" 09 2019 г.

всего листов 1  
лист 1

Наименование продукции:  
Место отбора:

Атмосферный воздух  
Участки работ для объекта «Реконструкция автомобильной дороги Республиканского значения А-27 «Актобе-Атырау-граница РФ (на Астрахань)» участок км 418-458»

Заявитель: (наименование, адрес)

ТОО «АК ЖОЛ КҰРЫЛЫС» г.Актау, Промзона №9, зд.43

Акт отбора (измерения): (№ акта, дата, тип прибора)

№ 544 от 26.09.2019 г. газоанализатор ГАНК-4

Дата поступления образцов:

26.09.2019 г.

Дата проведения испытаний:

26.09.2019 г.

Обозначение НД на продукцию:

ГН №168 от 28.02.2015г.

Виды испытаний:

Периодические

Виды испытаний:		Периодические						Содержание загрязняющих веществ													
№ п.п.	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы																		
			Температура воздуха, °С	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углев.С <sub>12</sub> -С <sub>19</sub>		Сероводород		Пыль неорг.	
								факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Участок реконстр. дороги	СТ РК 2.302-2014	27	768	СВ	3	24	0,744±0,01	5,0	0,0087	0,4	0,0079	0,2	0,0113	0,5	0,072	1	0,0012	0,008	0,0081	0,15
2	Участок реконстр. дороги ПК97	СТ РК 2.302-2014	27	765	СВ	3	27	0,788±0,01	5,0	0,0110	0,4	0,0103	0,2	0,0124	0,5	0,068	1	0,0011	0,008	0,0087	0,15
3	Участок реконстр. дороги ПК118	СТ РК 2.302-2014	27	767	СВ	3	23	0,933±0,01	5,0	0,0099	0,4	0,0091	0,2	0,0117	0,5	0,064	1	0,0013	0,008	0,0092	0,15

Протокол распространяется только на образцы, подвергнутые испытаниям



Сарсенгазиев М.  
Ф.И.О.

Соболев Д.  
Ф.И.О.

*(Signature)*  
подпись



Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г.Атырау, ул.К.Сәтбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 437 от "30" 09 2019 г.

всего листов 1  
лист 1

Наименование продукции:

Атмосферный воздух

Место отбора:

Участок карьера по выемке грунта для объекта «Реконструкция автомобильной дороги Республиканского значения А-27 «Актобе-Атырау-граница РФ (на Астрахань)» участок км 418-458»

Заявитель: (наименование, адрес)

ТОО «Ак жол кұрылыс» г.Актау, Промзона №9, зд.43

Акт отбора (измерения): (№ акта, дата, тип прибора)

№ 543 от 26.09.2019 г. газоанализатор ГАНК-4

Дата поступления образцов:

26.09.2019 г.

Дата проведения испытаний:

26.09.2019 г.

Обозначение НД на продукцию:

ГН №168 от 28.02.2015г.

Виды испытаний:

Периодические

№ п.п	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ													
			Температура воздуха, °С	Атмосферное давление, мм.рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углев.С <sub>12</sub> -С <sub>10</sub>		Сероводород		Пыль неорг.	
								Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Карьер	СТ РК 2.302-2014	27	765	В	3	24	0,921±0,01	5,0	0,0121	0,4	0,0119	0,2	0,0133	0,5	0,071	1	0,0012	0,008	0,0141	0,15

Протокол распространяется только на образцы, подвергнутые испытаниям



Исполнитель:

Харсенталиев М.

Ф.И.О.

Руководитель И.О.

Хоболев Д.

Ф.И.О.

МП

*(Signature)*  
подпись

*(Signature)*  
подпись



Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г.Атырау, ул.К.Сәтбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 552 от "09" 12 2019 г.

всего листов 1  
лист 1

Наименование продукции:

Атмосферный воздух

Место отбора:

Площадка АБЗ для объекта «Реконструкция автомобильной дороги Республиканского значения А-27 «Актобе-Атырау-граница РФ (на Астрахань)» участок км 418-458»

Заявитель: (наименование, адрес)

ТОО «Ак жол кұрылыс» г.Ақтау, Промзона №9, зд.43

Акт отбора (измерения): (№ акта, дата, тип прибора)

№ 688 от 20.11.2019 г. газоанализатор ГАНК-4

Дата поступления образцов:

20.11.2019 г.

Дата проведения испытаний:

20.11.2019 г.

Обозначение НД на продукцию:

ГН №168 от 28.02.2015г.

Виды испытаний:

Периодические

№ п.п.	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ													
			Температура воздуха, °С	Атмосферное давление, мм.рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	CO		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углев. C <sub>12</sub> -C <sub>13</sub>		Сероводород		Пыль неорг.	
								Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>
1	Территория АБЗ	ГОСТ 12.1.005-88,	-4	766	С	3	53	0,721±0,01	5,0	0,0081	0,4	0,0073	0,2	0,0117	0,5	0,071	1	0,0010	0,008	0,0073	0,15
2	СЗЗ – Юго-Восточная часть	СТ РК 2.302-2014,	-4	766	С	3	53	0,724±0,01	5,0	0,0083	0,4	0,0074	0,2	0,0119	0,5	0,073	1	0,0011	0,008	0,0075	0,15
3	СЗЗ – Южная часть	МИ-4215-013-56591409-2010,	-4	766	С	3	53	0,726±0,01	5,0	0,0085	0,4	0,0076	0,2	0,0121	0,5	0,075	1	0,0012	0,008	0,0075	0,15
4	СЗЗ – Юго-Западная часть	МВИ-4215-004А-	-4	766	С	3	53	0,722±0,01	5,0	0,0082	0,4	0,0073	0,2	0,0120	0,5	0,072	1	0,0010	0,008	0,0074	0,15
5	СЗЗ – Северная часть	56591409-2012	-4	766	С	3	53	0,718±0,01	5,0	0,0078	0,4	0,0071	0,2	0,0116	0,5	0,069	1	0,0010	0,008	0,0071	0,15

Протокол распространяется только на образцы, подвергнутые испытаниям



Исполнитель:

Сарсенгалиев М.  
Ф.И.О.

Руководитель ИЛ:

Соболев Д.  
Ф.И.О.

МП

*(Signature)*  
подпись  
*(Signature)*  
подпись

KZ.T.06.1234  
TESTING

Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г.Атырау, ул.Қ.Сәтбаев, д.5, и.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 554 от "09" 12 2019 г.

всего листов 1

лист 1

Наименование продукции:

Атмосферный воздух

Место отбора:

Площадка карьер для объекта «Реконструкция автомобильной дороги Республиканского значения А-27  
«Актобе-Атырау-граница РФ (на Астрахань)» участок км 418-458»

Заявитель: (наименование, адрес)

ТОО «Ақ жол құрылыс» г.Ақтау, Промзона №9, зд.43

Акт отбора (измерения): (№ акта, дата, тип прибора)

№ 689-2 от 20.11.2019 г. газоанализатор ГАНК-4

Дата поступления образцов:

20.11.2019 г.

Дата проведения испытаний:

20.11.2019 г.

Обозначение НД на продукцию:

ГН №168 от 28.02.2015г.

Виды испытаний:

Периодические

№ п.п.	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ, мг/м³													
			Температура воздуха, °С	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углек. C <sub>62</sub> -C <sub>14</sub>		Сероводород		Пыль неорг.	
								Факт	Норма по НД	Факт	Норма по НД	Факт	Норма по НД	Факт	Норма по НД	Факт	Норма по НД	Факт	Норма по НД	Факт	Норма по НД
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Территория карьера	ГОСТ 12.1.005-88, СТ РК 2.302-2014, МИ-4215-013-56591409-2010, МВИ-4215-004А-56591409-2012	-4	767	С	2	47	0,933±0,01	5,0	0,0113	0,4	0,0110	0,2	0,0106	0,5	0,053	1	0,0010	0,008	0,0073	0,15

Протокол распространяется только на образцы, подвергнутые испытаниям



Сарсенгалиев М.

Ф.И.О.

Соболев Д.

Ф.И.О.

*(Signature)*  
подпись  
*(Signature)*  
подпись



Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г.Атырау, ул.Қ.Сатбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 553 от "09" 12 2019 г.

всего листов 1  
лист 1

Наименование продукции:

Атмосферный воздух

Место отбора:

Площадка участка дороги для объекта «Реконструкция автомобильной дороги Республиканского значения А-27  
«Актобе-Атырау-граница РФ (на Астрахань)» участок км 418-458»

Заявитель: (наименование, адрес)

ТОО «Ақ жол құрылыс» г.Ақтау, Промзона №9, зд.43

Акт отбора (измерения): (№ акта, дата, тип прибора)

№ 689 от 20.11.2019 г. газоанализатор ГАНК-4

Дата поступления образцов:

20.11.2019 г.

Дата проведения испытаний:

20.11.2019 г.

Обозначение НД на продукцию:

ГН №168 от 28.02.2015г.

Виды испытаний:

Периодические

№ п.п	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ, мг/м³													
			Температура воздуха, °С	Атмосферное давление, мм.рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углев.С <sub>12</sub> -С <sub>19</sub>		Сероводород		Пыль неорг.	
								Факт	Нормы по НД	Факт	Нормы по НД	Факт	Нормы по НД	Факт	Нормы по НД	Факт	Нормы по НД	Факт	Нормы по НД		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Уч. реконс. дороги ПК121	ГОСТ 12.1.005-88, СТ РК 2.302-2014, МИ-4215-013-56591409-2010, МВИ-4215-004А-56591409-2012	-4	765	С	3	54	0,838±0,01	5,0	0,0119	0,4	0,0121	0,2	0,0117	0,5	0,068	1	0,0012	0,008	0,0092	0,15
2	Уч. реконс. дороги ПК150		-4	766	С	3	51	0,812±0,01	5,0	0,0124	0,4	0,0118	0,2	0,0113	0,5	0,059	1	0,0011	0,008	0,0086	0,15

Протокол распространяется только на образцы, подвергнутые испытаниям



Исполнитель:

Сарсенгалиев М.  
Ф.И.О.

Руководитель ИЛ:

Соболев Д.  
Ф.И.О.

*(Signature)*  
подпись  
*(Signature)*  
подпись


## Attachment 8. Press release and list of participants

## Trainings, seminars, briefings, instructions

During the reporting period, unscheduled briefings have been held on fire safety and road safety, also meeting with the participation of the company's employees and engineers. The minutes of meeting, list of participants and photos are attached hereto.

**On Lot 6** in August, unscheduled briefings have been held on fire safety and road safety, also meeting with the participation of the company's employees and engineers. The minutes of meeting, list of participants and photos are attached hereto.

On 21.08.2019, "(Rodents) Deratization " and "(Cockroaches) Disinsection " were carried out in base camp for 1500 m2 area.



АҚ ЖОЛ ҚҰРЫЛЫҒ

Форма ДШ-15-06

Утверждено  
Директор  
ТОО «Ақ жол құрылыс»  
Ж.Б. Молдабаев  
«...» ..... 2019 год

**Протокол**  
**Товарищества с ограниченной ответственностью «Ақ жол құрылыс»**  
**«27» августа 2019г.**

**Полное наименование:** Товарищества с ограниченной ответственностью «Ақ жол құрылыс» (далее - ТОО).


**Наименование и место нахождения исполнительного органа Общества:**  
Исполнительный орган ТОО - Директор.  
Адрес: Республика Казахстан, 130000, Мангистауская область, г. Актау, Промышля №9, участок 43.

**Место проведения:** ст.Жамансары вахтовый городок ТОО «Ақ жол құрылыс»

**Время проведения:** «27» августа 2019 года.  
начало 22-00 часов  
окончание 22-30 часов.

**Присутствовали:**  
1. Инженер ОУ и ТБ – Подфунтиков А.  
2. Инженер БДД - Жамансария А.  
3. Начальник базы – Момынов Ж.  
4. Работники Лота №6 Мастер участка – Зинкаев М.  
5. Начальник АБЗ – Канев Р.  
6. Комендант – Ишаналиева Р.  
7. Фельдшер – Нурмуханов М.

**Повестка дня:**  
1. Знание и безопасность работников на рабочих местах.  
2. О выполнении требований требований противопожарной, электробезопасности, охраны труда на рабочем месте.  
3. Правила и порядок проживания на вахтовом городке.

**Протокол совещания**  
подготовил(а): Инженер по БДД  Жамансария А.

44	Молдабаев С.	Начальник	Удостоверен
45	Молдабаев С.	Начальник	Удостоверен
46	Молдабаев С.	Начальник	Удостоверен
47	Молдабаев С.	Начальник	Удостоверен
48	Молдабаев С.	Начальник	Удостоверен
49	Молдабаев С.	Начальник	Удостоверен
50	Молдабаев С.	Начальник	Удостоверен
51	Молдабаев С.	Начальник	Удостоверен
52	Молдабаев С.	Начальник	Удостоверен
53	Молдабаев С.	Начальник	Удостоверен
54	Молдабаев С.	Начальник	Удостоверен
55	Молдабаев С.	Начальник	Удостоверен
56	Молдабаев С.	Начальник	Удостоверен
57	Молдабаев С.	Начальник	Удостоверен
58	Молдабаев С.	Начальник	Удостоверен
59	Молдабаев С.	Начальник	Удостоверен
60	Молдабаев С.	Начальник	Удостоверен
61	Молдабаев С.	Начальник	Удостоверен
62	Молдабаев С.	Начальник	Удостоверен
63	Молдабаев С.	Начальник	Удостоверен
64	Молдабаев С.	Начальник	Удостоверен
65	Молдабаев С.	Начальник	Удостоверен
66	Молдабаев С.	Начальник	Удостоверен
67	Молдабаев С.	Начальник	Удостоверен
68	Молдабаев С.	Начальник	Удостоверен
69	Молдабаев С.	Начальник	Удостоверен
70	Молдабаев С.	Начальник	Удостоверен
71	Молдабаев С.	Начальник	Удостоверен
72	Молдабаев С.	Начальник	Удостоверен
73	Молдабаев С.	Начальник	Удостоверен
74	Молдабаев С.	Начальник	Удостоверен
75	Молдабаев С.	Начальник	Удостоверен
76	Молдабаев С.	Начальник	Удостоверен
77	Молдабаев С.	Начальник	Удостоверен
78	Молдабаев С.	Начальник	Удостоверен
79	Молдабаев С.	Начальник	Удостоверен
80	Молдабаев С.	Начальник	Удостоверен
81	Молдабаев С.	Начальник	Удостоверен
82	Молдабаев С.	Начальник	Удостоверен
83	Молдабаев С.	Начальник	Удостоверен
84	Молдабаев С.	Начальник	Удостоверен
85	Молдабаев С.	Начальник	Удостоверен
86	Молдабаев С.	Начальник	Удостоверен
87	Молдабаев С.	Начальник	Удостоверен
88	Молдабаев С.	Начальник	Удостоверен
89	Молдабаев С.	Начальник	Удостоверен
90	Молдабаев С.	Начальник	Удостоверен
91	Молдабаев С.	Начальник	Удостоверен
92	Молдабаев С.	Начальник	Удостоверен



**On September 12, 2019** a lecture was held by the Prevention Department Head of Atyrau AIDS Centre Mr.Erezhepov B. on the subject “Prevention of HIV / AIDS among the population” with the participation of the company's employees.



### Жиналыс хаттамасы

18.10.2019 ж.

Жамансор елді мекені.

«Ақ жол құрылыс» ЖШС қарасты Ақтобе-Атырау Жамансор елді мекенінде орналасқан жұмысшылар қаланың ұйым қызметкерлерімен болған жиналыс:

- |  |                |
|--|----------------|
| 1. «Ақ жол құрылыс» ЖШС участігінің бастығы: | С. Халданов    |
| 2. «Ақ жол құрылыс» ЖШС участігінің прорабы: | А. Абдикаликов |
| 3. БТХ Автокөлігінің механигі:               | О. Усұхбаев    |
| 4. Қауіпсіздік бөлімінің инспекторы:         | А. Булебаев    |
| 5. ЕҚ және ТҚ инженері:                      | А. Сабихов     |
| 6. ЖҚК инженері:                             | А. Жамансариев |
| 7. База басшысы:                             | Ж. Момышов     |
| 8. Фельдшер                                  | Р. Хожасева    |

### Жиналыс тақырыбы:

«Ақ жол құрылыс» ЖШС қарасты Жамансор елді мекенінде орналасқан жұмысшылар қаланың ішкі тәртіп, өрт қауіпсіздік және техника қауіпсіздік, жол ережесін бұзбау ұртық, қылмыстық оқиғаларды болдырмау мақсатында:

### Қойылған талаптар:

- Құрылыс қаланың шығару жүйелері мен жұмысшылар жолдың бойына қоюға тастауларын және жүрген жеріне тазалықты үнемі сақтау ескертіледі.
- Серіктестік берген арнайы киімдерді, құрал саймандарды мұқият пайдалануға жылы жүрулеріне ескертіледі.
- Жұмысшылар қаланың үнемі тазалықты сақтау (темеңді) қалдықтарын арнайы жерге тастауы және темекіні арнайы орында шегітуін талап етіледі.
- Спирттік ішімдік ішуге болмайтынын қатаң ескертілді спирттік ішімдік ішкен фактысы орын алғанда, әкімшілік шара қолданылады, жұмыстан босатылып қайтарылғанын бойынша ескертіледі.
- Барлық жұмысшылармен жүргізушілерге ұрлыққа жол берілмеуі үшін өздеріне бекітілген автокөліктермен техникаларды және қосалқы бөлшектерді мұқият қарауға жүрте. Кешкі менгілерде, техникалар бұзылған жағдайда оларды «Ягуар» ЖШС-ның күзетшілеріне тапсыруға.
- Қоймаларда және басқа материалдар сақталатын орындарға жауапты адамдар вахта ауысқан кезде бір-біріне тапсырған кезде қабылдап тапсыру журналдарын анық, зағтарды тізімдеп түгіндеп тапсыруға.
- Базаға барлық келген, кіріп шыққан техникалармен автокөліктерді мұқият қарауға тексеруші «Ягуар» ЖШС күзет фирмасының күзетшілеріне ескертіліп тапсырылды.
- Ұрлықтың алдын алу мақсатында вахтаның шығару жұмысшылардың өздерімен бірге алып жүретін жол сузекілерін «Ягуар» ЖШС күзетшілеріне тексеруі жүзделді.
- Елді мекен және нысан аралығында жолдарда жеңіл және жүк тасымалы көліктерін арнайы көрсетілген жылдамдықтан асырмауы көлік шамын жағып жүруін және қауіпсіздік белдігін тағып жүруін талап етілді.



- Автокөлік жүргізушілері және жалдамалы механизматор жүргізушілері вахтыға жұмысқа келгенде желі механизмнен көліктің құжаты жолдамасы алмай қағазын алмай жұмыс басына шықпауын ескертіледі.
- Жұмысшылар қаланың авто тұрағында жүргізушілерге авто тұрақты тама ұстауы жөндеу жұмыстарын болғаннан соң қосалқы бөлшек, майларды тастамауын талап етілді.
- Жұмысшылар жұмыс жасау барысында үнемі арнайы киімдерін киіп жүруін және таңертеңгілік техникалық қауіпсіздік, еңбек қауіпсіздік нұсқауымен және дәрігерлік тексеруден міндетті түрде өтуі, жұмыс уақытында жатқананда жатпауы.

Ақ жол құрылыс» ЖШС участігінің бастығы: *С. Халданов* С. Халданов

«Ақ жол құрылыс» ЖШС участігінің прорабы: *А. Абдикаликов* А. Абдикаликов

ЕҚ және ТҚ инженері: *А. Сабихов* А. Сабихов

Қауіпсіздік бөлімінің инспекторы: *А. Булебаев* А. Булебаев

ЖҚК инженері: *А. Жамансариев* А. Жамансариев

БТХ Автокөлігінің механигі: *О. Усұхбаев* О. Усұхбаев

База басшысы: *Ж. Момышов* Ж. Момышов

Фельдшер: *Р. Хожасева* Р. Хожасева



## Attachment 9. Site photos

**Испытательная лаборатория**  
**ТОО «ЭкоНорматив»** г.Атырау, ул.Қ.Сәтбаев, д.5, н.п.5  
 тел/факс: 8 (7122) 210628 e-mail: [ekonormativ@mail.ru](mailto:ekonormativ@mail.ru)  
 Аттестат аккредитации № KZ.И.06.1234 от 28.11.2016г.

Акт № 536  
 измерения атмосферного воздуха газоанализатором ГАНК-4

Заказчик (предприятие): Ф. Шахкай Констр. Групп. Ко. АТД  
 Место измерения: Терр. пришил. (10Т4) АБЗ (330-370 км)  
 Дата и время измерения: 25.09.19г  
 Обозначение НД на метод измерения: СТ РК 2.302-2014, ГОСТ 17.2.3.01-86, ГОСТ 17.2.6.02-85, ГОСТ 12.1.005-88

№ п/п	Точка отбора проб	Метеорологические характеристики атмосферы					Концентрация загрязняющих веществ, мг/м³						
		Температура воздуха, °C	Атмосферное давление, гПа	Направление ветра	Скорость ветра, м/с	Влажность, %	CO	NO	NO <sub>2</sub>	SO <sub>2</sub>	Углек. диоксид, C <sub>12</sub> -C <sub>19</sub>	H <sub>2</sub> S	Ионы аммония
1	Терр. пришил.	26	1022	СВ	2	31	0,733	0,0113	0,0118	0,0121	0,044	0,0010	0,0091
2	Южная часть СЗЗ	26	1022	СВ	2	31	0,735	0,0115	0,0120	0,0124	0,046	0,0010	0,0093
3	Ю-Западная часть СЗЗ	26	1022	СВ	2	31	0,737	0,0116	0,0122	0,0125	0,048	0,0012	0,0095
4	Западная часть СЗЗ	26	1022	СВ	2	31	0,734	0,0114	0,0119	0,0122	0,046	0,0011	0,0092
5	С-Вост. часть СЗЗ	26	1022	СВ	2	31	0,731	0,0110	0,0116	0,0120	0,042	0,0010	0,0088

Измерения произвел (Исполнитель): Сарсенжанов М  
 Ф.И.О., должность

Руководитель ИЛ: Соболев Д  
 Ф.И.О.

Представитель  
 Предприятия (Заказчик): Сарсенжанов МБ  
 Ф.И.О., должность

Подпись  
 Подпись  
 Подпись

Испытательная лаборатория  
 ТОО «ЭкоНорматив» г.Атырау, ул.Қ.Сәтбаев, д.5, н.п.5  
 тел/факс: 8 (7122) 210628 e-mail: [ekonormativ@mail.ru](mailto:ekonormativ@mail.ru)  
 Аттестат аккредитации № KZ.И.06.1234 от 28.11.2016г.

Акт № 537

измерения атмосферного воздуха газоанализатором ГАНК-4

Заказчик (предприятие):

Ф. Шахтай Констр. групп. Ко. LTD

Место измерения:

Терр. градошниц (ЛОТ 4) Карьер

Дата и время измерения:

25.09.19г.

Обозначение НД на метод измерения:

СТ РК 2.302-2014, ГОСТ 17.2.3.01-86, ГОСТ 17.2.6.02-85, ГОСТ 12.1.005-88

№ п/п	Точка отбора проб	Метеорологические характеристики атмосферы					Концентрация загрязняющих веществ, мг/м³						
		Температура воздуха, °C	Атмосферное давление, гПа	Направление ветра	Скорость ветра, м/с	Влажность, %	CO	NO	NO <sub>2</sub>	SO <sub>2</sub>	Углек. С <sub>12</sub> -С <sub>19</sub>	Н <sub>2</sub> S	ионы перел.
1	Карьер N1	25	1026	В	3	38	0,944	0,0113	0,0121	0,0127	0,031	0,0012	0,0068
2	Карьер N3	25	1024	В	2	41	0,731	0,0098	0,0081	0,0118	0,025	0,0010	0,0073
3	Карьер N6	26	1021	В	2	36	0,811	0,0110	0,0098	0,0068	0,029	0,0011	0,0071
4	Карьер N4	26	1023	В	2	37	0,772	0,0081	0,0073	0,0069	0,033	0,0012	0,0072
5	Карьер N5	26	1022	В	2	41	0,834	0,0071	0,0067	0,0059	0,029	0,0010	0,0069

Измерения произвел (Исполнитель):

Сарсенгашиев М

Ф.И.О., должность

Руководитель ИЛ:

Соболев Д

Ф.И.О.

Представитель

Предприятия (Заказчик):

Сарсенгашиев М

Ф.И.О., должность

С

подпись

С

подпись

С

подпись

Испытательная лаборатория  
 ТОО «ЭкоНорматив» г. Атырау, ул. Қ. Сәтбаев, д. 5, и.п. 5  
 тел/факс: 8 (7122) 210628 e-mail: ekonormativ@mail.ru  
 Аттестат аккредитации № KZ.И.06.1234 от 28.11.2016г.

Акт № 538

измерения атмосферного воздуха газоанализатором ГАНК-4

Заказчик (предприятие):

Ф. «Шаукай Констр. Учун Ко LTD»

Место измерения:

Терр. м-н (1074) Реконстр. дорог

Дата и время измерения:

25.09.19г.

Обозначение НД на метод измерения:

СТ РК 2.302-2014, ГОСТ 17.2.3.01-86, ГОСТ 17.2.6.02-85, ГОСТ 12.1.005-88

№ п/п	Точка отбора проб	Метеорологические характеристики атмосферы					Концентрация загрязняющих веществ, мг/м³							
		Темпе- ратура воздуха, °C	Атмос- ферное давление, гПа	Направ- ление ветра	Скорость ветра, м/с	Влаж- ность %	CO	NO	NO <sub>2</sub>	SO <sub>2</sub>	Умел C <sub>12</sub> -C <sub>19</sub>	H <sub>2</sub> S	иные неорг?	
5	Реконстр. дороги	24	1023	A	2	31	0,931	0,0122	0,0117	0,0144	0,153	0,0012	0,0073	
7	Строит. моста	24	1021	B	2	29	0,921	0,0119	0,0119	0,0134	0,108	0,0010	0,0065	
8	Строит. моста	24	1022	B	2	28	0,948	0,0113	0,0110	0,0123	0,098	0,0011	0,0069	
9	Карьер N6	24	1024	B	2	26	0,731	0,0095	0,0087	0,0087	0,051	0,0011	0,0072	
10	Карьер N5	23	1022	B	2	27	0,891	0,0073	0,0091	0,0095	0,073	0,0010	0,0070	
11	Карьер N4	24	1024	A	2	28	0,791	0,0068	0,0081	0,0071	0,051	0,0012	0,0073	

Измерения произвел (Исполнитель):

Сарсенжанов М

Ф.И.О., должность

Руководитель ИЛ:

Соболев Д

Ф.И.О.

Представитель

Предприятия (Заказчик):

Сарбегулов Н.С.

Ф.И.О., должность

подпись

подпись

подпись

KZ.T.06.1234  
TESTING

Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г.Атырау, ул.Қ.Сәтбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 547 от "09" 12 2019 г.

всего листов 1

лист 1

Наименование продукции:

Атмосферный воздух

Место отбора:

Площадка АБЗ объекта «Реконструкция автомобильной дороги Республиканского значения А-27

«Актобе-Атырау-граница РФ (на Астрахань)» участок км 330-370» ЛОТ4

Заявитель: (наименование, адрес)

Филиал Шанхай Констракшн Груп Ко.,Лтд в Казахстане г.Нур-Султан, ул.Достык 18, офис 216

Акт отбора (измерения): (№ акта, дата, тип прибора)

№ 678 от 20.11.2019 г. газоанализатор ГАНК-4

Дата поступления образцов:

20.11.2019 г.

Дата проведения испытаний:

20.11.2019 г.

Обозначение НД на продукцию:

ГН №168 от 28.02.2015г.

Виды испытаний:

Периодические

№ п.п.	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ													
			Температура воздуха, °С	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углев. C <sub>1</sub> -C <sub>4</sub>		Сероводород		Пыль неорг.	
								Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Террит. предпр-я	ГОСТ 12.1.005-88, СТ	-10	766	С	3	47	0,858±0,01	5,0	0,0093	0,4	0,0088	0,2	0,0121	0,5	0,048	1	0,0012	0,008	0,0073	0,15
2	СЗЗ – Юго-Восточная часть	РК 2.302-2014, МИ-	-10	766	С	3	47	0,859±0,01	5,0	0,0095	0,4	0,0091	0,2	0,0124	0,5	0,052	1	0,0012	0,008	0,0078	0,15
3	СЗЗ – Южная часть	4215-013-56591409-	-10	766	С	3	47	0,861±0,01	5,0	0,0097	0,4	0,0093	0,2	0,0125	0,5	0,054	1	0,0013	0,008	0,0084	0,15
4	СЗЗ – Юго- Западная часть	2010, МВН-4215-004А-	-10	766	С	3	47	0,858±0,01	5,0	0,0094	0,4	0,0089	0,2	0,0122	0,5	0,049	1	0,0011	0,008	0,0075	0,15
5	СЗЗ – Северная часть	56591409-2012	-10	766	С	3	47	0,855±0,01	5,0	0,0091	0,4	0,0086	0,2	0,0118	0,5	0,046	1	0,0011	0,008	0,0071	0,15

Протокол распространяется только на образцы, подвергнутые испытанием



Исполнитель:

Сарсенгаалиев М.

Ф.И.О.

Руководитель ИЛ:

Соболев Д.

Ф.И.О.

МП

Частичная перепечатка протокола испытаний без разрешения ТОО «ЭкоНорматив» запрещена



Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г.Атырау, ул.К.Сәтбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 548 от "09" 12 2019 г.

всего листов 1  
лист 1

Наименование продукции:  
Место отбора:

Атмосферный воздух

Участки объекта «Реконструкция автомобильной дороги Республиканского значения А-27  
«Актобе-Атырау-граница РФ (на Астрахань)» участок км 330-370» ЛОТ4

Заявитель: (наименование, адрес)

Филиал Шанхай Констракшн Груп Ко.,Лтд в Казахстане г.Нур-Султан, ул.Достык 18, офис 216

Акт отбора (измерения): (№ акта, дата, тип прибора)

№ 679 от 20.11.2019 г. газоанализатор ГАНК-4

Дата поступления образцов:

20.11.2019 г.

Дата проведения испытаний:

20.11.2019 г.

Обозначение НД на продукцию:

ГН №168 от 28.02.2015г.

Виды испытаний:

Периодические

№ п.п	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы						Содержание загрязняющих веществ, мг/м³													
			Температура воздуха, °С	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углев.С <sub>12</sub> -С <sub>18</sub>		Сероводород		Пыль неорг.		
								Факт	Норма по НД	Факт	Норма по НД	Факт	Норма по НД	Факт	Норма по НД	Факт	Норма по НД	Факт	Норма по НД	Факт	Норма по НД	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
1	Уч. реконстр. дороги	ГОСТ 12.1.005-88, СТ РК 2.302-2014, МИ-4215-013-56591409-2010, МВИ-4215-004А-56591409-2012	-10	767	С	2	51	0,861±0,01	5,0	0,0089	0,4	0,0075	0,2	0,0112	0,5	0,033	1	0,0010	0,008	0,0089	0,15	
2	Уч. строит.моста р.Салгыз		-10	765	С	2	53	0,843±0,01	5,0	0,0073	0,4	0,0071	0,2	0,0121	0,5	0,041	1	0,0012	0,008	0,0079	0,15	
3	Уч. строит.моста р.Ногайлы		-10	767	С	2	50	0,871±0,01	5,0	0,0068	0,4	0,0073	0,2	0,0119	0,5	0,037	1	0,0011	0,008	0,0077	0,15	

Протокол распространяется только на образцы, подвергнутые испытаниям

Исполнитель: Сарсенгадиев М.  
Ф.И.О.  
Руководитель ИЛ: Соболев Д.  
Ф.И.О.  
МП

*подпись*  
*подпись*

Частичная перепечатка протокола испытаний без разрешения ТОО «ЭкоНорматив» запрещена

## Annex 4 Information on noise and vibration measurement protocols, Lot 4.

[illegible]

Узгиреләи (иң) НК-ға сайкестирлне терттеулер жургизилд (Исследование образцов проводилось на соответствие НД Бирлгил санитариялык-эпидемиологиялык және гигиеналык талаптар, КО шешиммен бекитилген санитариялык-эпидемиологиялык кадалаулау(бақылау)) (Единые санитарно-эпидемиологические и гигиенические требования надзору (контролю) Уг). Решением Комиссии Таможенного союза 18 июня 2010года №299

Хислама 2 динда толтырылады (Протокол составляется в 2-х экземплярах)

Зерттеу жүргізген маманның аты, Т.А.Ә.  
(Ф.И.О., подпись специалиста проводившего исследование) Зертханама (лаборант) Ж.Т.Амелинкова

Зертана м'ясопродукція мари, Т.А.Ю.  
(Ф.І.О., підпис завідуючого лабораторією)



КР ДСМ ТЫКСККБ «Улутук сарантара органы» ШЖК РМК Атырау областы бойынша филиалынан;  
Кызылсуу ауданында болуп жаткан башкысы;  
Начальник Кызылсуу районного отделения физкультуры и спорта РТ на ПХВ  
«Национальный центр экспертизы» КККЕТУ МЭ РК по Атырауской области  
Р.Р. Асанов

Т.А.Э., к.ф.н. (Ф.И.О. не указано)

CAREC Corridors 1 & 6 Connector Road (Aktobe - Makat) Reconstruction Project (section km 330-504) / Contract 02-ADB/CSC-2017 (CSC-2)

CAREC Corridors 1 & 6 Connector Road (Aktobe - Makat) Reconstruction Project (section km 330-504) / Contract 02-ADB/CSC-2017 (CSC-2)

[illegible]

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## Annex 5. Information on measurement protocols of radiation background, Lot 4

  
Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г.Атырау, ул.К.Сәтбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № КЗ.Т.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 90 от "30" 09 2019 г. всего листов 1 лист 1

Наименование продукции: радиационный фон  
Место отбора: участок работ на объекте «Реконструкция автомобильной дороги Республиканского значения А-27 «Актобе-Атырау-граница РФ (на Астрахань)» участок км 330-370»  
Заявитель: (наименование, адрес) Филиал Шанхай Констракшн Груп Ко., Лтд в Казахстане г.Нур-Султан, ул.Достык 18, офис 216  
Акт отбора (измерения) (№ акта, дата, тип прибора): № 539 от 25.09.2019г. радиометр-дозиметр РКС-01Г СОЛО

Дата поступления образцов: 25.09.2019г.  
Дата проведения испытаний: 25.09.2019г.  
Обозначение НД на продукцию: «Сам-эвидент. требования к обеспечению радиационной безопасности» от 27 февраля 2015 года № 155  
Виды испытаний: Периодические

№ п.п	Наименование точек измерений	НД на метод испытаний	Наименование измеряемого параметра	
			Мощность эквивалентной дозы гамма-излучения	Фактическое значение, мкЗв/час
1	2	3	4	5
1	Территория площадки АБЗ	ГОСТ Р МЭК 1066-93	0,034-0,051	не более 0,20
2	Участок реконструкции дороги	ГОСТ Р МЭК 1066-93	0,042-0,048	не более 0,20
3	Территория карьера №1	ГОСТ Р МЭК 1066-93	0,031-0,042	не более 0,20
4	Территория карьера №3	ГОСТ Р МЭК 1066-93	0,028-0,037	не более 0,20
5	Территория карьера №6	ГОСТ Р МЭК 1066-93	0,030-0,038	не более 0,20
6	Территория карьера №4	ГОСТ Р МЭК 1066-93	0,037-0,043	не более 0,20
7	Территория карьера №5	ГОСТ Р МЭК 1066-93	0,029-0,036	не более 0,20

Протокол распространяется только на образцы, подвергнутые испытаниям

Руководитель ИЛ:   
Соболев Д.  
Ф.И.О.

Испытательная лаборатория  
ТОО «ЭкоНорматив» г.Атырау, ул.К.Сәтбаев, д.5, н.п.5  
тел/факс: 8 (7122) 210628 e-mail: [ekonormativ@mail.ru](mailto:ekonormativ@mail.ru)  
Аттестат аккредитации № КЗ.И.06.1234 от 28.11.2016г.

Акт № 539  
радиационного измерения радиометр-дозиметром РКС-01Г-СОЛО

Заказчик (предприятие): Ф. Шанхай Констр Групп Ко ЛТД

Площадь отбора пробы: Терр. участок (АБЗ) (330-370)

Дата и время измерения: 25.09.19г.

Обозначение НД на метод измерения: ГОСТ Р МЭК 1066-93

№ п/п	Место измерения	Мощность эквивалентной дозы гамма-излучения, мкЗв/час
1	Терр. участок АБЗ	0,034 - 0,051
2	Терр. участок реконстр. дороги	0,042 - 0,048
3	Терр. участок карьера №1	0,031 - 0,042
4	Терр. участок карьера №3	0,028 - 0,037
5	Терр. участок карьера №6	0,030 - 0,038
6	Терр. участок карьера №4	0,037 - 0,043
7	Терр. участок карьера №5	0,029 - 0,036

Измерения произвел (Исполнитель) Соболев Д.  
Ф.И.О., должность

Представитель Предприятия (Заказчик) Саткенов А.Б.  
Ф.И.О., должность

## 2nd Semi-Annual Environmental Monitoring Report for 2019

CAREC Corridors 1 & 6 Connector Road (Aktobe - Makat) Reconstruction Project (section km 330-504) / Contract 02-ADB/CSC-2017 (CSC-2)

Независимая лаборатория  
ТОО «ЭкоНорматив» г.Астана, мкр.Авангард-4, а.5, № 29  
телефон: 8(7122) 365536, 210628. E-mail: ekoNormativ@gmail.kz  
Аттестат аккредитации № КЗ.Н.06.1234 от 28.11.2016г.

АКТ № 540  
отбора проб воды

Заказчик (предприятие): Ф. Шакиев "Восток-Транс" Ко. АТД

Наименование объекта: Город Шакиев (А074)

Дата отбора проб: 25.09.19г.

НД на отбор проб: СТ РК ГОСТ 51592-2000

Вид пробы: проба воды

Тип емкости, в которую помещается проба: стекло  
чистая, сухая, новая, сертифицированная

Тип пробы воды: поверхностная  
из водоема, водотока, источника, подземная

Методы консервации: \_\_\_\_\_

Оборудование использованное для отбора проб: пробирочный аппарат

№	Время отбора проб	Место отбора проб	Объем пробы в л	Температура, °С
1	15:40	р. Сауы	1	12
2	16:08	р. Мотыги	1	12

вид, марка, название (модель), принцип, распространение по территории водоема

Отбор произвел: Сарсенгалиев М.  
Ф.И.О., должность

Представитель: Сарсенгалиев А.Б.  
Ф.И.О., должность

Предприятие (Заказчик): \_\_\_\_\_

## Annex 6. Atmospheric Air Measurement Protocol, Lot 5



Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г.Атырау, ул.Қ.Сәтбаев, д.5, и.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 439 от "30" 09 2019 г.

всего листов 1  
лист 1

Наименование продукции:

Атмосферный воздух

Место отбора:

Площадка АБЗ объекта «Реконструкция автомобильной дороги Республиканского значения А-27

«Актобе-Атырау-граница РФ (по Астрахань)» участок км 370-418»

Заявитель: (наименование, адрес)

ТОО «Ақ жол қурылыс» г.Ақтау, Промзона №9, зд.43

Акт отбора (измерения): (№ акта, дата, тип прибора)

№ 548-2 от 26.09.2019 г. газоанализатор ГАНК-4

Дата поступления образцов:

26.09.2019 г.

Дата проведения испытаний:

26.09.2019 г.

Обозначение НД на продукцию:

ГН №168 от 28.02.2015г.

Виды испытаний:

Периодические

№ п.п.	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ													
			Температура воздуха, °С	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углек. С <sub>12</sub> -С <sub>10</sub>		Сероводород		Пыль неорг.	
								Факт, мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт, мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт, мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт, мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт, мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт, мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт, мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Термо. прибор	СТ РК 2.302-2014	27	765	В	3	47	0.751±0.01	5.0	0.0122	0.4	0.0119	0.2	0.0142	0.5	0.036	1	0.0011	0.008	0.0084	0.15
2	СЗЗ – Юго-Западная часть	СТ РК 2.302-2014	27	765	В	3	47	0.752±0.01	5.0	0.0124	0.4	0.0119	0.2	0.0146	0.5	0.038	1	0.0012	0.008	0.0088	0.15
3	СЗЗ – Западная часть	СТ РК 2.302-2014	27	765	В	3	47	0.755±0.01	5.0	0.0127	0.4	0.0122	0.2	0.0148	0.5	0.041	1	0.0013	0.008	0.0091	0.15
4	СЗЗ – Северо-Западная часть	СТ РК 2.302-2014	27	765	В	3	47	0.753±0.01	5.0	0.0122	0.4	0.0120	0.2	0.0145	0.5	0.037	1	0.0011	0.008	0.0086	0.15
5	СЗЗ – Восточная часть	СТ РК 2.302-2014	27	765	В	3	47	0.750±0.01	5.0	0.0122	0.4	0.0117	0.2	0.0141	0.5	0.033	1	0.0011	0.008	0.0081	0.15

Протокол действителен только на образцы, подвергнутые испытаниям



Исполнитель:

Зарезаева М.

Ф.И.О.

Исполнитель ИР:

Сейменов Д.

Ф.И.О.

МНЗ

Частичная передача протокола испытаний без разрешения ТОО «ЭкоНорматив» запрещена



Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г. Атырау, ул. К. Сәтбаев, д. 5, п. п. 5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 440 от "30" 09 2019 г.

всего листов 1  
лист 1

Наименование продукции:  
Место отбора:

Атмосферный воздух  
Участки работ для объекта «Реконструкция автомобильной дороги Республиканского значения А-27 «Актобе-Атырау-граница РФ (на Астрахань)» участок км 370-418»  
ТОО «Ак жол құрылыс» г. Актау, Промзона №9, зд. 43  
№ 548-3 от 26.09.2019 г. газоанализатор ГАНК-4  
26.09.2019 г.  
26.09.2019 г.  
ГН №168 от 28.02.2015г.  
Периодические

Обозначение НД на продукцию		Периодические																				
Виды испытаний:		НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ														
№ п.п.	Наименование точек отбора проб		Температура воздуха, °С	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углек. C <sub>12</sub> -C <sub>13</sub>		Сероводород		Пыль неорг.		
								Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
1	Участок карьера	СТ РК 2.302-2014	27	765	В	2	32	0,794±0,01	5,0	0,0087	0,4	0,0088	0,2	0,0121	0,5	0,039	1	0,0012	0,008	0,0084	0,15	
2	Участок реконстр. дороги	СТ РК 2.302-2014	27	768	В	2	37	0,824±0,01	5,0	0,0099	0,4	0,0087	0,2	0,0094	0,5	0,048	1	0,0011	0,008	0,0077	0,15	

Протокол распространяется только на образцы, подвергнутые испытаниям



Исполнитель:

Сарсеналиев М.

Руководитель ИЛ:

Соболев Д.

МД

Частичная переписка протокола испытаний без разрешения ТОО «ЭкоНорматив» запрещена

## 2nd Semi-Annual Environmental Monitoring Report for 2019

CAREC Corridors 1 & 6 Connector Road (Aktobe - Makat) Reconstruction Project (section km 330-504) / Contract 02-ADB/CSC-2017 (CSC-2)



Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г.Атырау, ул.Қ.Сәтбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 551 от "09" 12 2019 г.

всего листов 1  
лист 1

Наименование продукции:

Атмосферный воздух

Место отбора:

Площадка карьера для объекта «Реконструкция автомобильной дороги Республиканского значения А-27 «Актобе-Атырау-граница РФ (на Астрахань)» участок км 370-418»

Заявитель: (наименование, адрес)

ТОО «Ақ жол құрылыс» г.Ақтау, Промзона №9, зд.43

Акт отбора (измерения): (№ акта, дата, тип прибора)

№ 686 от 20.11.2019 г. газоанализатор ГАНК-4

Дата поступления образцов:

20.11.2019 г.

Дата проведения испытаний:

20.11.2019 г.

Обозначение НД на продукцию:

ГН №168 от 28.02.2015г.

Виды испытаний:

Периодические

№ п.п.	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ													
			Температура воздуха, °С	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углер. С <sub>12</sub> -С <sub>18</sub>		Сероокислород		Пыль неорг.	
								Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Территория карьера	ГОСТ 12.1.005-88, СТ	-8	767	С	2	46	0,941±0,01	5,0	0,0073	0,4	0,0068	0,2	0,0091	0,5	0,054	1	0,0011	0,008	0,0083	0,15
2	СЗЗ – Юго-Восточная часть	РК 2.302-2014, МИ-	-8	767	С	2	46	0,947±0,01	5,0	0,0076	0,4	0,0072	0,2	0,0094	0,5	0,059	1	0,0012	0,008	0,0084	0,15
3	СЗЗ – Южная часть	4215-013-56591409-	-8	767	С	2	46	0,951±0,01	5,0	0,0078	0,4	0,0074	0,2	0,0096	0,5	0,061	1	0,0013	0,008	0,0085	0,15
4	СЗЗ – Юго-Западная часть	2010, МВИ-4215-004А-	-8	767	С	2	46	0,944±0,01	5,0	0,0074	0,4	0,0069	0,2	0,0092	0,5	0,057	1	0,0011	0,008	0,0083	0,15
5	СЗЗ – Северная часть	56591469-2012	-8	767	С	2	46	0,941±0,01	5,0	0,0070	0,4	0,0066	0,2	0,0088	0,5	0,052	1	0,0010	0,008	0,0081	0,15

Протокол распространяется только на образцы, подвергнутые испытаниям



Сарсеналиев М.

Ф.И.О.

Соболев Д.

Ф.И.О.

*(подпись)*  
подпись

Частичная перепечатка протокола испытаний без разрешения ТОО «ЭкоНорматив» запрещается



KZ.T.06.1234  
TESTING

Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г.Атырау, ул.Қ.Сәтбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 551 от "09" 12 2019 г.

всего листов 1

лист 1

Наименование продукции:

Атмосферный воздух

Место отбора:

Площадка карьера для объекта «Реконструкция автомобильной дороги Республиканского значения А-27

«Актобе-Атырау-граница РФ (на Астрахань)» участок км 370-418»

Заявитель: (наименование, адрес)

ТОО «Ақ жол құрылыс» г.Ақтау, Промзона №9, зд.43

Акт отбора (измерения): (№ акта, дата, тип прибора)

№ 686 от 20.11.2019 г. газоанализатор ГАНК-4

Дата поступления образцов:

20.11.2019 г.

Дата проведения испытаний:

20.11.2019 г.

Обозначение НД на продукцию:

ГН №168 от 28.02.2015г.

Виды испытаний:

Периодические

№ п.п	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ													
			Температура воздуха, °С	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углев.С <sub>12</sub> -С <sub>19</sub>		Сероводород		Пыль неорг.	
								Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Территория карьера	ГОСТ 12.1.005-88, СТ	-8	767	С	2	46	0,941±0,01	5,0	0,0073	0,4	0,0068	0,2	0,0091	0,5	0,054	1	0,0011	0,008	0,0083	0,15
2	СЗЗ – Юго-Восточная часть	РК 2.302-2014, МИ-	-8	767	С	2	46	0,947±0,01	5,0	0,0076	0,4	0,0072	0,2	0,0094	0,5	0,059	1	0,0012	0,008	0,0084	0,15
3	СЗЗ – Южная часть	4215-013-56591409-	-8	767	С	2	46	0,951±0,01	5,0	0,0078	0,4	0,0074	0,2	0,0096	0,5	0,061	1	0,0013	0,008	0,0085	0,15
4	СЗЗ – Юго-Западная часть	2010, МВИ-4215-004А-	-8	767	С	2	46	0,944±0,01	5,0	0,0074	0,4	0,0069	0,2	0,0092	0,5	0,057	1	0,0011	0,008	0,0083	0,15
5	СЗЗ – Северная часть	56591409-2012	-8	767	С	2	46	0,941±0,01	5,0	0,0070	0,4	0,0066	0,2	0,0088	0,5	0,052	1	0,0010	0,008	0,0081	0,15

Протокол распространяется только на образцы, подвергнутые испытаниям



Исполнитель:

Сарсенгалиев М.  
Ф.И.О.

Руководитель ИЛ:

Соболев Д.  
Ф.И.О.

МП

Частичная перепечатка протокола испытаний без разрешения ТОО «ЭкоНорматив» запрещена

## Annex 7. Atmospheric Air Measurement Protocol, Lot 6



Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г. Атырау, ул. Қасымов, д.5, и.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 436 от "30" 09 2019 г.

всего листов 1  
лист 1

Наименование продукции:

Место отбора:

Заявитель: (наименование, адрес)

Акт отбора (измерения): (№ акта, дата, тип прибора)

Дата поступления образцов:

Дата проведения испытаний:

Обозначение НД на продукцию:

Виды испытаний:

Атмосферный воздух

Площадка АБЗ объекта «Реконструкция автомобильной дороги Республиканского значения А-27

«Актобе-Атырау-граница РФ (на Астрахань)» участок км 418-458»

ТОО «Ак жол құрылыс» г. Актау, Промзона №9, зд.43

№ 542 от 26.09.2019 г. газоанализатор ГАНК-4

26.09.2019 г.

26.09.2019 г.

ГН №168 от 28.02.2015г.

Периодические

Виды испытаний:		Периодические																			
№ п.п.	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ													
			Температура воздуха, °С	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углев. C <sub>12</sub> -C <sub>18</sub>		Серо-диоксид		Пыль неорг.	
								Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Террит. предпр-я	СТ РК 2.302-2014	27	765	СВ	3	22	0,821±0,01	5,0	0,0093	0,4	0,0110	0,2	0,0121	0,5	0,057	1	0,0010	0,008	0,0091	0,15
2	СЗЗ – Южная часть	СТ РК 2.302-2014	27	765	СВ	3	22	0,823±0,01	5,0	0,0094	0,4	0,0112	0,2	0,0123	0,5	0,060	1	0,0011	0,008	0,0092	0,15
3	СЗЗ – Юго-Западная часть	СТ РК 2.302-2014	27	765	СВ	3	22	0,824±0,01	5,0	0,0095	0,4	0,0114	0,2	0,0126	0,5	0,061	1	0,0012	0,008	0,0094	0,15
4	СЗЗ – Западная часть	СТ РК 2.302-2014	27	765	СВ	3	22	0,822±0,01	5,0	0,0093	0,4	0,0111	0,2	0,0122	0,5	0,059	1	0,0011	0,008	0,0092	0,15
5	СЗЗ – Северо-Восточная часть	СТ РК 2.302-2014	27	765	СВ	3	22	0,819±0,01	5,0	0,0091	0,4	0,0110	0,2	0,0119	0,5	0,056	1	0,0010	0,008	0,0090	0,15

Протокол распространяется только на образцы, подвергнутые испытаниям



Исполнитель:

Сарсенгалев М.

(ф.и.о.)

Руководитель ИЛ:

Дободев Д.

(ф.и.о.)

МП

Частичная перепечатка протокола испытаний без разрешения ТОО «ЭкоНорматив» запрещена



Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г.Атырау, ул.К.Сәтбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 438 от "30" 09 2019 г.

всего листов 1  
лист 1

Наименование продукции:  
Место отбора:

Атмосферный воздух  
Участки работ для объекта «Реконструкция автомобильной дороги Республиканского значения А-27 «Актобе-Атырау-граница РФ (на Астрахань)» участок км 418-458»

Заявитель: (наименование, адрес)

ТОО «Ак жол кұрылыс» г.Ақтау, Промзона №9, зд.43

Акт отбора (измерения): (№ акта, дата, тип прибора)

№ 544 от 26.09.2019 г. газоанализатор ГАНК-4

Дата поступления образцов:

26.09.2019 г.

Дата проведения испытаний:

26.09.2019 г.

Обозначение НД на продукцию:

ГН №168 от 28.02.2015г.

Виды испытаний:

Периодические

№ п.п.	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ												Пыль неорг.	
			Температура воздуха, °С	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углев.С <sub>2</sub> -С <sub>10</sub>		Сероводород		Пыль неорг.	
								Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>
1			4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Участок реконстр. дороги	СТ РК 2.302-2014	27	768	СВ	3	24	0,744±0,01	5,0	0,0087	0,4	0,0079	0,2	0,0113	0,5	0,072	1	0,0012	0,008	0,0081	0,15
2	Участок реконстр. дороги ПК97	СТ РК 2.302-2014	27	765	СВ	3	27	0,788±0,01	5,0	0,0110	0,4	0,0103	0,2	0,0124	0,5	0,068	1	0,0011	0,008	0,0087	0,15
3	Участок реконстр. дороги ПК118	СТ РК 2.302-2014	27	767	СВ	3	23	0,933±0,01	5,0	0,0099	0,4	0,0091	0,2	0,0117	0,5	0,064	1	0,0013	0,008	0,0092	0,15

Протокол распространяется только на образцы, подвергнутые испытанию



Сарсеналиев М.  
Ф.И.О.

Соболев Д.  
Ф.И.О.

*(Signature)*  
Ф.И.О.



**Испытательная лаборатория ТОО «ЭкоНорматив»**  
 адрес: г.Атырау, ул.К.Сәтбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
 Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

**ПРОТОКОЛ ИСПЫТАНИЙ № 437 от "30" 09 2019 г.**

всего листов 1  
 лист 1

**Наименование продукции:**

Атмосферный воздух

**Место отбора:**

Участок карьера по выемке грунта для объекта «Реконструкция автомобильной дороги Республиканского значения А-27 «Актобе-Атырау-граница РФ (на Астрахань)» участок км 418-458»

**Заявитель: (наименование, адрес)**

ТОО «Ак жол құрылыс» г.Ақтау, Промзона №9, зд.43

**Акт отбора (измерения): (№ акта, дата, тип прибора)**

№ 543 от 26.09.2019 г. газоанализатор ГАНК-4

**Дата поступления образцов:**

26.09.2019 г.

**Дата проведения испытаний:**

26.09.2019 г.

**Обозначение НД на продукцию:**

ГН №168 от 28.02.2015г.

**Виды испытаний:**

Периодические

№ п.п.	Наименование точек отбора пробо	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ													
			Температура воздуха, °С	Атмосферное давление, мм.рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углев. C <sub>12</sub> -C <sub>19</sub>		Сероводород		Пыль неорг.	
								Факт., мг/м <sup>3</sup>	Нормы по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Нормы по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Нормы по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Нормы по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Нормы по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Нормы по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Нормы по НД, мг/м <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Карьер	СТ РК 2.302-2014	27	765	В	3	24	0,921±0,01	5,0	0,0121	0,4	0,0119	0,2	0,0133	0,5	0,071	1	0,0012	0,008	0,0141	0,15

Протокол распространяется только на образцы, подвергнутые испытаниям



Исполнитель:

Сарсенгазиев М.

Ф.И.О.

Руководитель:

Соболев Д.

Ф.И.О.

МП

KZ.T.06.1234  
TESTING

Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г.Атырау, ул.К.Сәтбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 552 от "09" 12 2019 г.

всего листов 1  
лист 1

Наименование продукции:

Атмосферный воздух

Место отбора:

Площадка АБЗ для объекта «Реконструкция автомобильной дороги Республиканского значения А-27  
«Актобе-Атырау-граница РФ (на Астрахань)» участок км 418-458»

Заявитель: (наименование, адрес)

ТОО «Ак жол қурылыс» г.Ақтау, Промзона №9, зд.43

Акт отбора (измерения): (№ акта, дата, тип прибора)

№ 688 от 20.11.2019 г. газоанализатор ГАНК-4

Дата поступления образцов:

20.11.2019 г.

Дата проведения испытаний:

20.11.2019 г.

Обозначение НД на продукцию:

ГН №168 от 28.02.2015г.

Виды испытаний:

Периодические

№ п.п	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ													
			Температура воздуха, °С	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	CO		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углев. C <sub>12</sub> -C <sub>13</sub>		Сероводород		Пыль неорг.	
								Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>	Факт., мг/м <sup>3</sup>	Норма по НД, мг/м <sup>3</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Территория АБЗ	ГОСТ 12.1.005-88, СТ РК 2.302-2014, МВИ-4215-013- 56591409-2010, МВИ-4215-004А- 56591409-2012	-4	766	С	3	53	0,721±0,01	5,0	0,0081	0,4	0,0073	0,2	0,0117	0,5	0,071	1	0,0010	0,008	0,0073	0,15
2	СЗЗ – Юго-Восточная часть		-4	766	С	3	53	0,724±0,01	5,0	0,0083	0,4	0,0074	0,2	0,0119	0,5	0,073	1	0,0011	0,008	0,0075	0,15
3	СЗЗ – Южная часть		-4	766	С	3	53	0,726±0,01	5,0	0,0085	0,4	0,0076	0,2	0,0121	0,5	0,075	1	0,0012	0,008	0,0075	0,15
4	СЗЗ – Юго-Западная часть		-4	766	С	3	53	0,722±0,01	5,0	0,0082	0,4	0,0073	0,2	0,0120	0,5	0,072	1	0,0010	0,008	0,0074	0,15
5	СЗЗ – Северная часть		-4	766	С	3	53	0,718±0,01	5,0	0,0078	0,4	0,0071	0,2	0,0116	0,5	0,069	1	0,0010	0,008	0,0071	0,15

Протокол распространяется только на образцы, подвергнутые испытаниям



Исполнитель:

Сарсенғалиев М.

Ф.И.О.

Руководитель ИЛ:

Соболев Д.

Ф.И.О.

МП

*(Signature)*  
подпись  
*(Signature)*  
подпись



Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г.Атырау, ул.Қ.Сәтбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 554 от " 09 " 12 20 19 г.

всего листов 1  
лист 1

Наименование продукции: Атмосферный воздух  
Место отбора: Площадка карьер для объекта «Реконструкция автомобильной дороги Республиканского значения А-27 «Актобе-Атырву-граница РФ (на Астрахань)» участок км 418-458»  
Заявитель: (наименование, адрес) ТОО «Ақ жол құрылыс» г.Ақтау, Промзона №9, зд.43  
Акт отбора (измерения): (№ акта, дата, тип прибора) № 689-2 от 20.11.2019 г. газоанализатор ГАНК-4  
Дата поступления образцов: 20.11.2019 г.  
Дата проведения испытаний: 20.11.2019 г.  
Обозначение НД на продукцию: ГН №168 от 28.02.2015г.  
Виды испытаний: Периодические

№ п.п	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ, мг/м³													
			Температура воздуха, °С	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углер. С <sub>6</sub> -С <sub>18</sub>		Сероводород		Пыль неорг.	
								Факт	Норма по НД	Факт	Норма по НД	Факт	Норма по НД	Факт	Норма по НД	Факт	Норма по НД	Факт	Норма по НД	Факт	Норма по НД
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Территория карьера	ГОСТ 12.1.005-88, СТ РК 2.302-2014, МН-4215-013-56591409-2010, МВН-4215-004А-56591409-2012	-4	767	С	2	47	0,933±0,01	5,0	0,0113	0,4	0,0110	0,2	0,0106	0,5	0,053	1	0,0010	0,008	0,0073	0,15

Протокол распространяется только на образцы, подвергнутые испытаниям



Исполнитель: Сарсеналиев М.  
Ф.И.О.

Руководитель ИЛ: Соболев Д.  
Ф.И.О.

*М.С.С.*  
подпись  
*Р.Р.*  
подпись

KZ.T.06.1234  
TESTING

Испытательная лаборатория ТОО «ЭкоНорматив»  
адрес: г.Атырау, ул.К.Сатбаев, д.5, н.п.5, тел.: 8(7122) 21-06-28  
Аттестат аккредитации № KZ.T.06.1234 от 28.11.2016г.

ПРОТОКОЛ ИСПЫТАНИЙ № 553 от "09" 12 2019 г.

всего листов 1  
лист 1

Наименование продукции:

Атмосферный воздух

Место отбора:

Площадка участка дороги для объекта «Реконструкция автомобильной дороги Республиканского значения А-27  
«Актобе-Атырау-граница РФ (на Астрахань)» участок км 418-458»

Заявитель: (наименование, адрес)

ТОО «Ақ жол құрылыс» г.Ақтау, Промзона №9, зд.43

Акт отбора (измерения): (№ акта, дата, тип прибора)

№ 689 от 20.11.2019 г. газоанализатор ГАНК-4

Дата поступления образцов:

20.11.2019 г.

Дата проведения испытаний:

20.11.2019 г.

Обозначение НД на продукцию:

ГН №168 от 28.02.2015г.

Виды испытаний:

Периодические

№ п.п.	Наименование точек отбора проб	НД на метод испытаний	Метеорологические характеристики атмосферы					Содержание загрязняющих веществ, мг/м <sup>3</sup>													
			Температура воздуха, °С	Атмосферное давление, мм рт.ст.	Направление ветра	Скорость ветра, м/с	Влажность, %	СО		NO		NO <sub>2</sub>		SO <sub>2</sub>		Углев. C <sub>12</sub> -C <sub>13</sub>		Сероводород		Пыль неорг.	
								Факт	Нормы по НД	Факт	Нормы по НД	Факт	Нормы по НД	Факт	Нормы по НД	Факт	Нормы по НД	Факт	Нормы по НД	Факт	Нормы по НД
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Уч. реконс. дороги ПК121	ГОСТ 12.1.005-88, СТ РК 2.302-2014, МИ-4215-013-56591409-2010, МВИ-4215-004А-56591409-2012	-4	765	С	3	54	0,838±0,01	5,0	0,0119	0,4	0,0121	0,2	0,0117	0,5	0,068	1	0,0012	0,008	0,0092	0,15
2	Уч. реконс. дороги ПК150	ГОСТ 12.1.005-88, СТ РК 2.302-2014, МИ-4215-013-56591409-2010, МВИ-4215-004А-56591409-2012	-4	766	С	3	51	0,812±0,01	5,0	0,0124	0,4	0,0118	0,2	0,0113	0,5	0,059	1	0,0011	0,008	0,0086	0,15

Протокол распространяется только на образцы, подвергнутые испытаниям



Исполнитель:

Сарсенгалиев М.  
Ф.И.О.

Руководитель ИЛ:

Соболев Д.  
Ф.И.О.

*[Signature]*  
подпись

*[Signature]*  
подпись



## Annex No. 8. Press release and list of participants

## Trainings, seminars, briefings, briefings

During the reporting period, unscheduled briefings on fire safety and road safety were held, as well as meetings with the company's employees and engineers and other technical workers. The Protocol of the meeting, the list of participants and photos are attached.

On Lot 6 for the month of August, unscheduled fire safety and road safety briefings were held, as well as meetings with the company's employees and engineers and other technical workers. The Protocol of of the meeting, a list of those present, and photo materials are attached.

21.08.2019 in the town was held "Deratization (rodents)" and "Disinsection (cockroaches)" area of 1500 m2.

 <p><b>АҚ ЖОЛ ҚҰРЫЛЫҒ</b></p>	<p>Форма ДШ-15.06</p> <p>Участие Директор ТОО «Ақ жол құрылыс» Ж.Б. Мамышев «...» ..... 2019 год</p>
<p><b>Протокол</b> <b>Товарищества с ограниченной ответственностью «Ақ жол құрылыс»</b> <b>«27» августа 2019г.</b></p>	
<p><b>Полное наименование:</b> Товарищества с ограниченной ответственностью «Ақ жол құрылыс» (далее - ТОО), <b>Наименование и место нахождения исполнительного органа Общества:</b> Исполнительный орган ТОО - Директор, Адрес: Республика Казахстан, 130000, Мангистауская область, г. Актау, Промысла №9, участок 43.</p>	
<p><b>Место проведения:</b> ст.Жамансар националь гараж ТОО «Ақ жол құрылыс» <b>Время проведения:</b> «27» августа 2019 года, начало 22:40 часов окончание 22:30 часов.</p>	
<p><b>Присутствовали:</b> 1. Инженер ОТ и ТБ – Пашафутыла А. 2. Инженер БЖД - Жамансариев А. 3. Начальник базы - Мамышев Ж. 4. Работник Лота №6 Мастер участка - Зиязов М. 5. Инженер АБЗ – Касымов Р. 6. Командир – Исламжанов Р. 7. Фельдшер – Нурмуханов М.</p>	
<p><b>Повестка дня:</b> 1. Задание и безопасность работников на рабочих местах. 2. О выполнении сотрудниками требований противопожарной, электробезопасности, охраны труда на рабочем месте. 3. Правила и порядок проживания на вахтовом городке.</p>	
<p><b>Протокол совещания</b> подготовил(а): Инженер по БЖД  <b>Жамансариев А.</b></p>	

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On September 12, 2019, a lecture was held by the head of the AIDS prevention Department of the Atyrau city center, B. E. Yerezhepova, on the topic "HIV/AIDS Prevention among the population" with the participation of company employees.



### Жиналыс хаттамасы

18.10.2019 ж.

Жамансор елді мекені.

«Ақ жол құрылыс» ЖШС қарасты Ақтобе-Атырау Жамансор елді мекенінде орналасқан жұмысшылар қаланың ұйым қызметкерлерімен болған жиналыс:

- |  |                |
|--|----------------|
| 1. «Ақ жол құрылыс» ЖШС участігінің бастығы: | С. Халданов    |
| 2. «Ақ жол құрылыс» ЖШС участігінің прорабы: | А. Абдиқаликов |
| 3. БТХ Автоқолігінің механигі:               | О. Усұхбаев    |
| 4. Қауіпсіздік бөлімінің инспекторы:         | А. Булебаев    |
| 5. ЕҚ және ТҚ инженері:                      | А. Сабихов     |
| 6. ЖҚК инженері:                             | А. Жамансариев |
| 7. База басшысы:                             | Ж. Момышов     |
| 8. Фельдшер                                  | Р. Хожаева     |

### Жиналыс тақырыбы:

«Ақ жол құрылыс» ЖШС қарасты Жамансор елді мекенінде орналасқан жұмысшылар қаланың ішкі тәртіп, өрт қауіпсіздік және техника қауіпсіздік, жол ережесін бұзбау ұртық, қылмыстық оқиғаларды болдырмау мақсатында:

### Қойылған талаптар:

- Құрылыс қаланың шығыс жүргізушілер мен жұмысшылар жолдың бойына қоюға тастауларын және жүрген жеріне тазалықты үнемі сақтау ескеріледі.
- Серіктестік берген арнайы киімдерді, құрал саймандарды мұқият пайдалануға жылы жүрулеріне ескеріледі.
- Жұмысшылар қаланың үнемі тазалықты сақтау (темеңі) қалдықтарын арнайы жерге тастауы және темекіні арнайы орында шегітуін талап етіледі.
- Спирттік ішімдік ішуге болмайтынын қатаң ескертілді спирттік ішімдік ішкен фактысы орын алғанда, әкімшілік шара қолданылады, жұмыстан босатылып қайтарылғаны бойынша ескертілді.
- Барлық жұмысшылармен жүргізушілерге ұрлыққа жол берілмеуі үшін өздеріне бекітілген автоқоліктермен техникаларды және қосалқы бөлшектерді мұқият қарауға, кешкі менгілерде, техникалар бұзылған жағдайда оларды «Ягуар» ЖШС-ның күзетшілеріне тапсыруға.
- Қоймаларда және басқа материалдар сақталатын орындарға жауапты адамдар вахта ауысқан кезде бір-біріне тапсырған кезде қабылдап тапсыру журналдарын анық, зағтарды тізімдеп түгелдеп тапсыруға.
- Базаға барлық келген, кіріп шыққан техникалармен автоқоліктерді мұқият қарауға тексеруді «Ягуар» ЖШС күзет фирмасының күзетшілеріне ескертіліп тапсырылды.
- Ұрлықтың алдын алу мақсатында вахтаның шығыс жұмысшылардың өздерімен бірге алып жүретін жол сузекілерін «Ягуар» ЖШС күзетшілеріне тексеруі жүзделді.
- Елді мекен және нысан аралығында жолдарда жеңіл және жүк тасымалы көліктерін арнайы көрсетілген жылдамдықтан асырмауы көлік шамын жағып жүруін және қауіпсіздік белдігін тағып жүруін талап етілді.



- Автоқолік жүргізушілері және жалдамалы механизматор жүргізушілері вахтыға жұмысқа келгенде желі механизмнен көліктің құжаты жолдамасы алмай қағазын алмай жұмыс басына шықпауын ескертіледі.
- Жұмысшылар қаланың авто тұрағында жүргізушілерге авто тұрақты тама ұстауы жолдау жұмыстарын болғаннан соң қосалқы бөлшек, майларды тастамауын талап етілді.
- Жұмысшылар жұмыс жасау барысында үнемі арнайы киімдерін киіп жүруін және таңертеңгілік техникалық қауіпсіздік, еңбек қауіпсіздік нұсқауымен және дәрігерлік тексеруден міндетті түрде өтуі, жұмыс уақытында жатқананда жатпауы.

Ақ жол құрылыс» ЖШС участігінің бастығы: *С.Х.* С. Халданов

«Ақ жол құрылыс» ЖШС участігінің прорабы: *А.А.* А. Абдиқаликов

ЕҚ және ТҚ инженері: *А.С.* А. Сабихов

Қауіпсіздік бөлімінің инспекторы: *А.Б.* А. Булебаев

ЖҚК инженері: *А.Ж.* А. Жамансариев

БТХ Автоқолігінің механигі: *О.У.* О. Усұхбаев

База басшысы: *Ж.М.* Ж. Момышов

Фельдшер: *Р.Х.* Р. Хожаева



**Приложение 9. Фотографии с участков**



**Industrial Enviromental Monitoring on atmospheric air (Lot 4), October 2019**



**02.10.2019, the Asian Development Bank (ADB) Mission  
on CAREC Corridors 1 and 6 Connector Road “Aktobe-Makat” reconstruction project site (km 418-458) Contract No.006-ADB/CW-2018  
Industrial Environmental Control for the 3 quarter, 18.09.2019 (Lot 6)**



**Atmospheric air monitoring for the 4 quarter, 20.11.2019 (Lot 6)**



**Fire safety board. Safety equipment on construction camp territory, Lot 5**





Fire safety board. Safety equipment on construction camp territory, Lot 6

**Industrial Enviromental Monitoring on atmospheric air for the 3 quarter (Lot 5)**

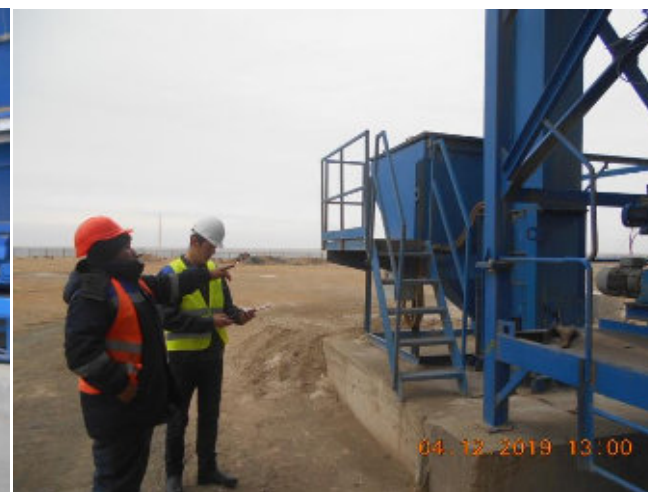




**Waste containers on construction camp territory, Lot 5**



**Waste containers on construction camp territory, Lot 6**



Noise and vibration measurement on Asphalt plant territory, Lot 6

**Attachment 10**

**Environmental monitoring checklist**

Lot 7 site inspection checklist		
<b>Site visiting date:</b> 6.08.2019  <b>Time:</b> 10:00	<b>Engineer's Representative:</b> Environmental specialist Novossadova N.  <b>Contractor's Representative:</b> Gulzhanat -Environmental specialist	Engineer's ref. No.   Contractor's ref. No.
Weather condition: clear, +38 C°, southeast wind with speed 5 m/s		
Work is in progress:	Profile levelling, slope construction	
Issues related to environment	Possible reasons	Proposed mitigation measures
Too much dust on the road	Hot weather condition and soil characteristics, also insufficient watering of the road could be a reason	To increase number of water trucks and to intensify the watering near to villages
Unsafety condition on the bypass roads	Insufficient number of road safety teams or low control by the Contractor	To increase number of water trucks and to intensify the watering near to villages
Environmental audit done by:  Novossadova N.		Contractor's Representative:  Gulzhanat Zhantokova

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
Contractor's base camp						
1	Septic tanks are installed and cleaned according to approved procedures	✓				

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
2	All effluents flow to septic tanks or to reservoirs for construction water	✓		✓		
3	All hazardous liquids are collected on non-permeable facilities at designated area	✓		✓		Arranged a special concrete area, installed fences
4	Solid hazardous materials are stored on designated safe places at work areas	✓		✓		Arranged a special concrete area, installed fences to keep hazardous materials in accordance with the requirements
5	Effluents are collected in drain system and disposed by the Contractor	✓		✓		
6	All vehicle drive in and out the base camp are controlled	✓		✓		
7	Local communities and organizations are informed about construction schedule and any noisy activities on a regular basis through workers and by other activities	✓		✓		The Contractor attends the meetings at Dossor and Makat and informs Akimat and the public about construction stages
8	Open containers for material storage are covered with canvas	✓		✓		Oil waste tanks at construction sites are put into closed containers for further disposal
9	Open fire is prohibited	✓		✓		No open fire neither on site nor base camp

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
10	Fire-fighting equipment <ul style="list-style-type: none"> <li>Sand bucket and shovel</li> <li>Foam fire extinguisher</li> <li>Fire blanket in the canteen</li> </ul>	✓		✓		
11	Entering of strangers to base camp is prohibited by installing fencing and security	✓		✓		There is a security man and checkpoint at the base camp entrance
12	All employees provided with personal protective equipment (PPE)	✓		✓		
13	Smoking is prohibited except smoking places	✓		✓		There are smoking places on base camp territory
14	Relevant road signs and warning signs are installed on site and at unsafe areas	✓		✓		Road Safety Plans are being followed
15	Drinking water is provided by commercial and licensed sources for all employees	✓		✓		
16	Safety clothes of all employees are washed every day	✓		✓		Safety clothes of all employees are washed as necessary
17	All employees are provided with three time meal per day	✓		✓		Local residents have lunch only as they do not work on rotation. It does not breach the Labor Code of the RK.
18	Canteen with sanitary and hygienic conditions on camp	✓		✓		
19	Medical facility and first aid kit on camp and on work areas	✓		✓		First aid kits are replenished as necessary. Logbook for medical facility visit is maintained

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
20	All employees health is under control of base camp doctor, and appropriate services are provided, also a monthly health checks	✓		✓		Daily pre-work check-up of employees are arranged in medical facility and logbook for daily health check-up (sobriety test, pressure and etc.) is maintained.
21	All territory are clean, there is no any waste, except special places for waste disposal	✓		✓		
22	Provision of rest area on camp	✓				There are the rest areas and rest rooms
23	Child labour (younger than 15 year)		✓			Not observed
<b>Production site</b>						
1	Liquid wastes from Asphalt Plant are stored in a tank and disposed by vacuum truck	✓		✓		
2	Solid wastes from Asphalt Plant are stored at designated area and disposed per approved procedures	✓		✓		
3	The plant area is covered by gravel in order to reduce a dusting	✓		✓		
4	The plant area is watered in order to reduce a dusting	✓		✓		According to dust control schedule and depending on weather conditions. Dust control measure is increased if windy.
5	Plant can not discharge effluents to any area; non-permeable concrete basins will be constructed for such purpose	✓		✓		

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
6	All employees of Asphalt concrete and Crusher Plants are supplied with dust masks	✓		✓		
7	All employees at Asphalt Plants are wearing dust masks	✓		✓		
8	Sand and crushed stone for concrete and asphalt are stored on wet and covered place	✓		✓		
9	There is a fire fighting equipment in Asphalt Plant	✓		✓		
10	Plant or equipment with high vibration are installed properly, maintained and operated correctly	✓		✓		
<b>Fuel station</b>						
1	Oil filling will be strictly controlled and is permitted only at the fuel filling station and on workshop area	✓		✓		
2	Fuel tank storage area is fenced and it is a non-permeable, tank's roof is closed		✓	✓		Fence and warning signs are installed
3	Fuel station, which provided with fire fighting equipment, is checked every week	✓		✓		Regular control of fire extinguisher's validity and logbook maintenance to record its replacement
4	There is the warning signs at fuel station		✓		✓	
5	Fuel station is provided with wastebasket	✓				
<b>Contractor's Workshop and Car Wash</b>						

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
1	Liquid hazardous materials are stored in designated area at the workshop	✓		✓		Arranged a special concreted areas to keep a hazardous materials and installed a fence
2	Solid hazardous materials are stored in designated area at the workshop	✓		✓		
3	There are containers for used oils and hydraulic liquids	✓		✓		
4	Used oil products are collected in concrete tank with a volume up to 110% and tank is cleaned according to approved procedures		✓	✓		
5	Workshop is provided with drainage system	✓				
6	Every vehicle is inspected and maintained on a regular basis	✓		✓		To strengthen daily control of special machinery
7	All construction vehicles meet Euro standards and are equipped with modern noise control equipment		✓	✓		
8	Noise control equipment of all vehicles is maintained and checked as per the approved procedures	✓		✓		
9	All workshop workers are provided with welding equipment and personal protective equipment	✓		✓		
10	All construction water is collected in concrete tank and cleaned as per the approved procedures		✓	✓		
<b>Project Road</b>						

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
1	All roads, where planed construction works, are watered by water trucks	✓		✓		To increase watering time and water truck number during rain-free period and to take special control the sites near to villages
2	There are structures for passage of cattle, sheep and other animals on appropriate places of the project road		✓		✓	
3	Culvert and bridge construction areas are provided with safety ribbons and wringing signs	✓				
4	Fencing and checkpoint are installed at all work areas where necessary		✓		✓	
5	Waste storage for any kind as well as machinery or vehicles parking is not permitted within a distance of 100m from any facility (including drainage or irrigation facilities)	✓		✓		
6	All appropriate road signs and warning signs are provided on work sites and unsafe areas	✓		✓		
7	Construction vehicle and plants are maintained properly to reduce gas emissions	✓		✓		To strengthen control over special machinery
8	Noise control measures at special areas	✓		✓		
<b>Borrow pits</b>						
1	Temporary drainage is provided at borrow pits and quarries	✓		✓		

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
2	Construction work is stopped between 10.00 p.m. and 6.00 a.m. at 200m from the nearest habitation	✓		✓		There is no any close village
3	Stockpiles do not exceed 3m in height	✓		✓		
4	All vehicles with an open body are used for transportation of materials with possible dusting, designed for these purposes with a well-chosen convertible body	✓		✓		
5	During construction works all noise volume is reduced according to the national standards	✓		✓		
6	Materials with possible dusting are not loaded higher than convertible body level and covered with clean canvas	✓		✓		Operators and recorders monitor the level of soil loading
7	All vehicles, equipment and plant meet Euro standards for exhaust gas emissions		✓	✓		
8	All temporary acquired land is rehabilitated		✓			After completion of construction works
9	All material residues and contaminated sites are collected and disposed accordance with approved procedures		✓	✓		
10	Watering is provided during material delivery and processing	✓		✓		
11	Any adjacent areas are damaged due to spoil ground, restored to its original state	✓		✓		

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
12	River banks are protected from materials or temporary stockpiles of the contractor	✓				
13	Negative effects or violations due to construction works are controlled with permissible level according to standards	✓				
14	Access roads to borrow pits, and also borrow pits, quarries and traffic operations are maintained by approved standards	✓		✓		
15	Water discharge and removal, avoiding flooding or damaging to other works or service causing erosion	✓				
<b>Flora and Fauna</b>						
1	Trees and shrubs outside of construction site, but on road reserve are generally preserved from damages					There are no trees on construction site territory
2	Ancient trees have not cut during construction works					There are no ancient trees on construction site territory
3	Cutting off has not taken place without the prior permission of relevant local authorities					No trees
4	Trees or shrubs cut or removed only if they interfere for necessary temporary or permanent works					No trees
5	Construction works are stopped on bridge sites during harvest period (indicate yes or no to construction activities, indicate date)		✓			Bridge construction does not affect to cultivation and harvesting, because they are located on far places

### Environmental monitoring checklist

Lot 6 site inspection checklist		
<b>Site visiting date:</b> 22.09.2019  <b>Time:</b> 09:00	<b>Engineer's Representative:</b> Environmental specialist Novossadova N.  <b>Contractor's Representative:</b> Gulzhanat - Environmental specialist Safety and Road Safety specialists	Engineer's ref. No.   Contractor's ref. No.
Weather condition: clear, +5 C°, southeast wind with speed 7 m/s		
Work is in progress:	Topographic survey of Lot 6 site, culvert disassembly	
Issues related to environment	Possible reasons	Proposed mitigation measures
Too much dust on the road	Hot weather condition and soil characteristics, also insufficient watering of the road could be a reason	To increase number of water trucks and to intensify the watering near to villages

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
Contractor's base camp						
1	Septic tanks are installed and cleaned according to approved procedures	✓				
2	All effluents flow to septic tanks or to reservoirs for construction water			✓		Base camp is being constructed
3	All hazardous liquids are collected on non-permeable facilities at designated area		✓	✓		Places were chosen, base camp is being constructed

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
4	Solid hazardous materials are stored on designated safe places at work areas		✓	✓		Places were chosen, base camp is being constructed
5	Effluents are collected in drain system and disposed by the Contractor		✓	✓		
6	All vehicle drive in and out the base camp are controlled	✓		✓		Road Safety specialist and mechanic are controlling this work
7	Local communities and organizations are informed about construction schedule and any noisy activities on a regular basis through workers and by other activities			✓		
8	Open containers for material storage are covered with canvas	✓		✓		Place was chosen for storage with the further disposal
9	Open fire is prohibited	✓		✓		No open fire neither on site nor base camp
10	Fire-fighting equipment <ul style="list-style-type: none"> <li>▪ Sand bucket and shovel</li> <li>▪ Foam fire extinguisher</li> <li>▪ Fire blanket in the canteen</li> </ul>	✓		✓		
11	Entering of strangers to base camp is prohibited by installing fencing and security	✓		✓		There is a security man and checkpoint at the base camp entrance
12	All employees provided with personal protective equipment (PPE)	✓		✓		Not all employees provided
13	Smoking is prohibited except smoking places	✓		✓		There are smoking places on base camp territory

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
14	Relevant road signs and warning signs are installed on site and at unsafe areas	✓		✓		Road Safety Plan have been preparing
15	Drinking water is provided by commercial and licensed sources for all employees	✓		✓		
16	Safety clothes of all employees are washed every day	✓				Safety clothes of all employees are washed as necessary
17	All employees are provided with three time meal per day	✓				Local residents have lunch only as they do not work on rotation. It does not breach the Labor Code of the RK.
18	Canteen with sanitary and hygienic conditions on camp	✓				
19	Medical facility and first aid kit on camp and on work areas	✓		✓		First aid kits are replenished as necessary. Logbook for medical facility visit is maintained
20	All employees health is under control of base camp doctor, and appropriate services are provided, also a monthly health checks	✓		✓		Daily pre-work check-up of employees are arranged in medical facility and logbook for daily health check-up (sobriety test, blood pressure and etc.) is maintained.
21	All territory are clean, there is no any waste, except special places for waste disposal		✓	✓		Base camp is being constructed
22	Provision of rest area on camp		✓			

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
23	Child labour (younger than 15 year)		✓			Not observed
<b>Production site</b>						
1	Liquid wastes from Asphalt Plant are stored in a tank and disposed by vacuum vehicle Liman ≤MTTSTH≥		✓	✓		
2	Solid wastes from Asphalt Plant are stored at designated area and disposed per approved procedures		✓			Plants are not installed
3	The plant area is covered by gravel in order to reduce a dusting		✓	✓		
4	The plant area is watered in order to reduce a dusting		✓	✓		Documents have been preparing in order to receive permits
5	Plant can not discharge effluents to any area; non-permeable concrete basins will be constructed for such purpose		✓	✓		Permanent control by the Contractor's environmental specialist
6	All employees of Asphalt concrete and Crusher Plants are supplied with dust masks		✓	✓		It is in Health and Safety Plan
7	All employees at Asphalt Plants are wearing dust masks		✓	✓		By the purchase order
8	Sand and crushed stone for concrete and asphalt are stored on wet and covered place					No work
9	There is a fire fighting equipment in Asphalt Plant		✓	✓		It is included in the EMP and Fire Safety
10	Plant or equipment with high vibration are installed properly, maintained and operated correctly		✓	✓		

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
Fuel station						
1	Oil filling will be strictly controlled and is permitted only at the fuel filling station and on workshop area	✓		✓		
2	Fuel tank storage area is fenced and it is a non-permeable, tank's roof is closed		✓	✓		It is being constructed
3	Fuel station, which provided with fire fighting equipment, is checked every week		✓	✓		
4	There is the warning signs at fuel station		✓		✓	
5	Fuel station is provided with wastebasket		✓			
Contractor's Workshop and Car Wash						
1	Liquid hazardous materials are stored in designated area at the workshop		✓	✓		Arranged a special concreted areas to keep a hazardous materials and installed a fence
2	Solid hazardous materials are stored in designated area at the workshop		✓	✓		
3	There are containers for used oils and hydraulic liquids	✓		✓		
4	Used oil products are collected in concrete tank with a volume up to 110% and tank is cleaned according to approved procedures		✓	✓		
5	Workshop is provided with drainage system		✓	✓		

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
6	Every vehicle is inspected and maintained on a regular basis	✓		✓		To strengthen daily control of special machinery
7	All construction vehicles meet Euro standards and are equipped with modern noise control equipment		✓	✓		
8	Noise control equipment of all vehicles is maintained and checked as per the approved procedures		✓	✓		
9	All workshop workers are provided with welding equipment and personal protective equipment	✓		✓		
10	All construction water is collected in concrete tank and cleaned as per the approved procedures		✓	✓		
<b>Project Road</b>						
1	All roads, where planed construction works, are watered by water trucks	✓		✓		To increase watering time and water truck number during rain-free period and to take special control the sites near to villages
2	There are structures for passage of cattle, sheep and other animals on appropriate places of the project road		✓		✓	
3	Culvert and bridge construction areas are provided with safety ribbons and wringing signs	✓				
4	Fencing and checkpoint are installed at all work areas where necessary		✓		✓	

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
5	Waste storage for any kind as well as machinery or vehicles parking is not permitted within a distance of 100m from any facility (including drainage or irrigation facilities)	✓		✓		
6	All appropriate road signs and warning signs are provided on work sites and unsafe areas	✓		✓		
7	Construction vehicle and plants are maintained properly to reduce gas emissions	✓		✓		To strengthen control over special machinery
8	Noise control measures at special areas	✓		✓		
<b>Borrow pits during monitoring there was no work at borrow pits</b>						
1	Temporary drainage is provided at borrow pits and quarries			✓		
2	Construction work is stopped between 10.00 p.m. and 6.00 a.m. at 200m from the nearest habitation			✓		There is no any close village
3	Stockpiles do not exceed 3m in height			✓		
4	All vehicles with an open body are used for transportation of materials with possible dusting, designed for these purposes with a well-chosen convertible body			✓		
5	During construction works all noise volume is reduced according to the national standards			✓		

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
6	Materials with possible dusting are not loaded higher than convertible body level and covered with clean canvas			✓		Operators and recorders monitor the level of soil loading
7	All vehicles, equipment and plant meet Euro standards for exhaust gas emissions		✓	✓		
8	All temporary acquired land is rehabilitated		✓			After completion of construction works
9	All material residues and contaminated sites are collected and disposed accordance with approved procedures		✓	✓		
10	Watering is provided during material delivery and processing		✓	✓		
11	Any adjacent areas are damaged due to spoil ground, restored to its original state		✓	✓		
12	River banks are protected from materials or temporary stockpiles of the contractor		✓			
13	Negative effects or violations due to construction works are controlled with permissible level according to standards		✓			
14	Access roads to borrow pits, and also borrow pits, quarries and traffic operations are maintained by approved standards		✓	✓		
15	Water discharge and removal, avoiding flooding or damaging to other works or service causing erosion		✓			
<b>Flora and Fauna</b>						

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
1	Trees and shrubs outside of construction site, but on road reserve are generally preserved from damages					There are no trees on construction site territory
2	Ancient trees have not cut during construction works					There are no ancient trees on construction site territory
3	Cutting off has not taken place without the prior permission of relevant local authorities					No trees
4	Trees or shrubs cut or removed only if they interfere for necessary temporary or permanent works					No trees
5	Construction works are stopped on bridge sites during harvest period (indicate yes or no to construction activities, indicate date)		✓			Bridge construction does not affect to cultivation and harvesting, because they are located on far places

### Environmental monitoring checklist

Lot 6 site inspection checklist		
<b>Site visiting date:</b> 29.10.2019  <b>Time:</b> 11:00	<b>Engineer's Representative:</b> Environmental specialist Novossadova N.  <b>Contractor's Representative:</b> Gulzhanat - Environmental specialist	Engineer's ref. No.   Contractor's ref. No.
Weather condition: clear, +5 C°, southeast wind with speed 7 m/s		
Work is in progress:	Milling of the existing road pavements on Lot 6 site, top soil removal	

Issues related to environment	Possible reasons	Proposed mitigation measures
Too much dust on the road	Hot weather condition and soil characteristics, also insufficient watering of the road could be a reason	To increase number of water trucks and to intensify the watering near to villages
Noise and vibration in base camp	Base camp is being constructed	To keep work schedule, not to work after 10.30 p.m.

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
Contractor's base camp						
1	Septic tanks are installed and cleaned according to approved procedures	✓				
2	All effluents flow to septic tanks or to reservoirs for construction water			✓		Base camp is being constructed
3	All hazardous liquids are collected on non-permeable facilities at designated area		✓	✓		Places were chosen, base camp is being constructed
4	Solid hazardous materials are stored on designated safe places at work areas		✓	✓		Places were chosen, base camp is being constructed
5	Effluents are collected in drain system and disposed by the Contractor		✓	✓		
6	All vehicle drive in and out the base camp are controlled	✓		✓		Road Safety specialist and mechanic are controlling this work
7	Local communities and organizations are informed about construction schedule and any noisy activities on a regular basis through workers and by other activities			✓		

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
8	Open containers for material storage are covered with canvas	✓		✓		Place was chosen for storage with the further disposal
9	Open fire is prohibited	✓		✓		No open fire neither on site nor base camp
10	Fire-fighting equipment <ul style="list-style-type: none"> <li>▪ Sand bucket and shovel</li> <li>▪ Foam fire extinguisher</li> <li>▪ Fire blanket in the canteen</li> </ul>	✓		✓		
11	Entering of strangers to base camp is prohibited by installing fencing and security	✓		✓		There is a security man and checkpoint at the base camp entrance
12	All employees provided with personal protective equipment (PPE)	✓		✓		Not all employees provided
13	Smoking is prohibited except smoking places	✓		✓		There are smoking places on base camp territory
14	Relevant road signs and warning signs are installed on site and at unsafe areas	✓		✓		Road Safety Plan have been preparing
15	Drinking water is provided by commercial and licensed sources for all employees	✓		✓		
16	Safety clothes of all employees are washed every day	✓				Safety clothes of all employees are washed as necessary
17	All employees are provided with three time meal per day	✓				Local residents have lunch only as they do not work on rotation. It does not breach the Labor Code of the RK.

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
18	Canteen with sanitary and hygienic conditions on camp	✓				
19	Medical facility and first aid kit on camp and on work areas	✓		✓		First aid kits are replenished as necessary. Logbook for medical facility visit is maintained
20	All employees health is under control of base camp doctor, and appropriate services are provided, also a monthly health checks	✓		✓		Daily pre-work check-up of employees are arranged in medical facility and logbook for daily health check-up (sobriety test, blood pressure and etc.) is maintained.
21	All territory are clean, there is no any waste, except special places for waste disposal			✓		Base camp is being constructed
22	Provision of rest area on camp		✓			
23	Child labour (younger than 15 year)		✓			Not observed
<b>Production site</b>						
1	Liquid wastes from Asphalt Plant are stored in a tank and disposed by vacuum vehicle Liman ≤MTTSTH≥		✓	✓		
2	Solid wastes from Asphalt Plant are stored at designated area and disposed per approved procedures		✓			Plants are not installed
3	The plant area is covered by gravel in order to reduce a dusting		✓	✓		
4	The plant area is watered in order to reduce a dusting		✓	✓		Documents have been preparing in order to receive permits

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
5	Plant can not discharge effluents to any area; non-permeable concrete basins will be constructed for such purpose		✓	✓		Permanent control by the Contractor's environmental specialist
6	All employees of Asphalt concrete and Crusher Plants are supplied with dust masks		✓	✓		It is in Health and Safety Plan
7	All employees at Asphalt Plants are wearing dust masks		✓	✓		By the purchase order
8	Sand and crushed stone for concrete and asphalt are stored on wet and covered place					No work
9	There is a fire fighting equipment in Asphalt Plant		✓	✓		It is included in the EMP and Fire Safety
10	Plant or equipment with high vibration are installed properly, maintained and operated correctly		✓	✓		
<b>Fuel station</b>						
1	Oil filling will be strictly controlled and is permitted only at the fuel filling station and on workshop area	✓		✓		
2	Fuel tank storage area is fenced and it is a non-permeable, tank's roof is closed	✓		✓		It is being constructed
3	Fuel station, which provided with fire fighting equipment, is checked every week		✓	✓		
4	There is the warning signs at fuel station		✓		✓	
5	Fuel station is provided with wastebasket		✓			

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
Contractor's Workshop and Car Wash						
1	Liquid hazardous materials are stored in designated area at the workshop		✓	✓		Arranged a special concreted areas to keep a hazardous materials and installed a fence
2	Solid hazardous materials are stored in designated area at the workshop		✓	✓		
3	There are containers for used oils and hydraulic liquids	✓		✓		
4	Used oil products are collected in concrete tank with a volume up to 110% and tank is cleaned according to approved procedures		✓	✓		
5	Workshop is provided with drainage system		✓	✓		
6	Every vehicle is inspected and maintained on a regular basis	✓		✓		To strengthen daily control of special machinery
7	All construction vehicles meet Euro standards and are equipped with modern noise control equipment		✓	✓		
8	Noise control equipment of all vehicles is maintained and checked as per the approved procedures		✓	✓		
9	All workshop workers are provided with welding equipment and personal protective equipment	✓		✓		
10	All construction water is collected in concrete tank and cleaned as per the approved procedures		✓	✓		
Project Road						

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
1	All roads, where planed construction works, are watered by water trucks	✓		✓		To increase watering time and water truck number during rain-free period and to take special control the sites near to villages
2	There are structures for passage of cattle, sheep and other animals on appropriate places of the project road		✓		✓	
3	Culvert and bridge construction areas are provided with safety ribbons and wringing signs	✓				
4	Fencing and checkpoint are installed at all work areas where necessary		✓		✓	
5	Waste storage for any kind as well as machinery or vehicles parking is not permitted within a distance of 100m from any facility (including drainage or irrigation facilities)	✓		✓		
6	All appropriate road signs and warning signs are provided on work sites and unsafe areas	✓		✓		
7	Construction vehicle and plants are maintained properly to reduce gas emissions	✓		✓		To strengthen control over special machinery
8	Noise control measures at special areas	✓		✓		
<b>Borrow pits during monitoring there was no work at borrow pits</b>						
1	Temporary drainage is provided at borrow pits and quarries			✓		

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
2	Construction work is stopped between 10.00 p.m. and 6.00 a.m. at 200m from the nearest habitation			✓		There is no any close village
3	Stockpiles do not exceed 3m in height			✓		
4	All vehicles with an open body are used for transportation of materials with possible dusting, designed for these purposes with a well-chosen convertible body			✓		
5	During construction works all noise volume is reduced according to the national standards			✓		
6	Materials with possible dusting are not loaded higher than convertible body level and covered with clean canvas			✓		Operators and recorders monitor the level of soil loading
7	All vehicles, equipment and plant meet Euro standards for exhaust gas emissions		✓	✓		
8	All temporary acquired land is rehabilitated		✓			After completion of construction works
9	All material residues and contaminated sites are collected and disposed accordance with approved procedures		✓	✓		
10	Watering is provided during material delivery and processing		✓	✓		
11	Any adjacent areas are damaged due to spoil ground, restored to its original state		✓	✓		

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
12	River banks are protected from materials or temporary stockpiles of the contractor		✓			
13	Negative effects or violations due to construction works are controlled with permissible level according to standards		✓			
14	Access roads to borrow pits, and also borrow pits, quarries and traffic operations are maintained by approved standards		✓	✓		
15	Water discharge and removal, avoiding flooding or damaging to other works or service causing erosion		✓			
<b>Flora and Fauna</b>						
1	Trees and shrubs outside of construction site, but on road reserve are generally preserved from damages					There are no trees on construction site territory
2	Ancient trees have not cut during construction works					There are no ancient trees on construction site territory
3	Cutting off has not taken place without the prior permission of relevant local authorities					No trees
4	Trees or shrubs cut or removed only if they interfere for necessary temporary or permanent works					No trees
5	Construction works are stopped on bridge sites during harvest period (indicate yes or no to construction activities, indicate date)		✓			Bridge construction does not affect to cultivation and harvesting, because they are located on far

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
						places

### Environmental monitoring checklist

Lot 6 site inspection checklist		
<b>Site visiting date:</b> 26.11.2019  <b>Time:</b> 9:00	<b>Engineer's Representative:</b> Environmental specialist Novossadova N.  <b>Without the Contractor</b>	Engineer's ref. No.   Contractor's ref. No.
Weather condition: clear, +5 C°, southeast wind with speed 7 m/s		
Work is in progress:	Milling of the existing road pavements on Lot 6 site, soil compaction, asphalt pavement construction	
Issues related to environment	Possible reasons	Proposed mitigation measures
Too much dust on the road	Hot weather condition and soil characteristics, also insufficient watering of the road could be a reason	To increase number of water trucks and to intensify the watering near to villages
Noise and vibration in base camp	Base camp is being constructed	To keep work schedule, not to work after 10.30 p.m.

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
Contractor's base camp						
1	Septic tanks are installed and cleaned according to approved procedures	✓				

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
2	All effluents flow to septic tanks or to reservoirs for construction water			✓		Base camp is being constructed
3	All hazardous liquids are collected on non-permeable facilities at designated area		✓	✓		Places were chosen, base camp is being constructed
4	Solid hazardous materials are stored on designated safe places at work areas		✓	✓		Places were chosen, base camp is being constructed
5	Effluents are collected in drain system and disposed by the Contractor		✓	✓		
6	All vehicle drive in and out the base camp are controlled	✓		✓		Road Safety specialist and mechanic are controlling this work
7	Local communities and organizations are informed about construction schedule and any noisy activities on a regular basis through workers and by other activities			✓		
8	Open containers for material storage are covered with canvas	✓		✓		Place was chosen for storage with the further disposal
9	Open fire is prohibited	✓		✓		No open fire neither on site nor base camp
10	Fire-fighting equipment <ul style="list-style-type: none"> <li>▪ Sand bucket and shovel</li> <li>▪ Foam fire extinguisher</li> <li>▪ Fire blanket in the canteen</li> </ul>	✓		✓		
11	Entering of strangers to base camp is prohibited by installing fencing and security	✓		✓		There is a security man and checkpoint at the base camp entrance

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
12	All employees provided with personal protective equipment (PPE)	✓		✓		Not all employees provided
13	Smoking is prohibited except smoking places	✓		✓		There are smoking places on base camp territory
14	Relevant road signs and warning signs are installed on site and at unsafe areas	✓		✓		Road Safety Plan have been preparing
15	Drinking water is provided by commercial and licensed sources for all employees	✓		✓		
16	Safety clothes of all employees are washed every day	✓				Safety clothes of all employees are washed as necessary
17	All employees are provided with three time meal per day	✓				Local residents have lunch only as they do not work on rotation. It does not breach the Labor Code of the RK.
18	Canteen with sanitary and hygienic conditions on camp	✓				
19	Medical facility and first aid kit on camp and on work areas	✓		✓		First aid kits are replenished as necessary. Logbook for medical facility visit is maintained
20	All employees health is under control of base camp doctor, and appropriate services are provided, also a monthly health checks	✓		✓		Daily pre-work check-up of employees are arranged in medical facility and logbook for daily health check-up (sobriety test, blood pressure and etc.) is maintained.

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
21	All territory are clean, there is no any waste, except special places for waste disposal		✓	✓		Base camp is being constructed
22	Provision of rest area on camp		✓			
23	Child labour (younger than 15 year)		✓			Not observed
<b>Production site</b>						
1	Liquid wastes from Asphalt Plant are stored in a tank and disposed by vacuum vehicle Liman ≤MTTSTH≥		✓	✓		
2	Solid wastes from Asphalt Plant are stored at designated area and disposed per approved procedures		✓			Plants are not installed
3	The plant area is covered by gravel in order to reduce a dusting		✓	✓		
4	The plant area is watered in order to reduce a dusting		✓	✓		Documents have been preparing in order to receive permits
5	Plant can not discharge effluents to any area; non-permeable concrete basins will be constructed for such purpose		✓	✓		Permanent control by the Contractor's environmental specialist
6	All employees of Asphalt concrete and Crusher Plants are supplied with dust masks		✓	✓		It is in Health and Safety Plan
7	All employees at Asphalt Plants are wearing dust masks		✓	✓		By the purchase order
8	Sand and crushed stone for concrete and asphalt are stored on wet and covered place					No work

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
9	There is a fire fighting equipment in Asphalt Plant		✓	✓		It is included in the EMP and Fire Safety
10	Plant or equipment with high vibration are installed properly, maintained and operated correctly		✓	✓		
<b>Fuel station</b>						
1	Oil filling will be strictly controlled and is permitted only at the fuel filling station and on workshop area	✓		✓		
2	Fuel tank storage area is fenced and it is a non-permeable, tank's roof is closed	✓		✓		It is being constructed
3	Fuel station, which provided with fire fighting equipment, is checked every week		✓	✓		
4	There is the warning signs at fuel station		✓		✓	
5	Fuel station is provided with wastebasket		✓			
<b>Contractor's Workshop and Car Wash</b>						
1	Liquid hazardous materials are stored in designated area at the workshop		✓	✓		Arranged a special concreted areas to keep a hazardous materials and installed a fence
2	Solid hazardous materials are stored in designated area at the workshop		✓	✓		
3	There are containers for used oils and hydraulic liquids	✓		✓		

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
4	Used oil products are collected in concrete tank with a volume up to 110% and tank is cleaned according to approved procedures		✓	✓		
5	Workshop is provided with drainage system		✓	✓		
6	Every vehicle is inspected and maintained on a regular basis	✓		✓		To strengthen daily control of special machinery
7	All construction vehicles meet Euro standards and are equipped with modern noise control equipment		✓	✓		
8	Noise control equipment of all vehicles is maintained and checked as per the approved procedures		✓	✓		
9	All workshop workers are provided with welding equipment and personal protective equipment	✓		✓		
10	All construction water is collected in concrete tank and cleaned as per the approved procedures		✓	✓		
<b>Project Road</b>						
1	All roads, where planed construction works, are watered by water trucks	✓		✓		To increase watering time and water truck number during rain-free period and to take special control the sites near to villages
2	There are structures for passage of cattle, sheep and other animals on appropriate places of the project road		✓		✓	

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
3	Culvert and bridge construction areas are provided with safety ribbons and warning signs	✓				
4	Fencing and checkpoint are installed at all work areas where necessary		✓		✓	
5	Waste storage for any kind as well as machinery or vehicles parking is not permitted within a distance of 100m from any facility (including drainage or irrigation facilities)	✓		✓		
6	All appropriate road signs and warning signs are provided on work sites and unsafe areas	✓		✓		
7	Construction vehicle and plants are maintained properly to reduce gas emissions	✓		✓		To strengthen control over special machinery
8	Noise control measures at special areas	✓		✓		
<b>Borrow pits during monitoring there was no work at borrow pits</b>						
1	Temporary drainage is provided at borrow pits and quarries			✓		
2	Construction work is stopped between 10.00 p.m. and 6.00 a.m. at 200m from the nearest habitation			✓		There is no any close village
3	Stockpiles do not exceed 3m in height			✓		
4	All vehicles with an open body are used for transportation of materials with possible dusting, designed for these purposes with a well-chosen convertible body			✓		

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
5	During construction works all noise volume is reduced according to the national standards			✓		
6	Materials with possible dusting are not loaded higher than convertible body level and covered with clean canvas			✓		Operators and recorders monitor the level of soil loading
7	All vehicles, equipment and plant meet Euro standards for exhaust gas emissions		✓	✓		
8	All temporary acquired land is rehabilitated		✓			After completion of construction works
9	All material residues and contaminated sites are collected and disposed accordance with approved procedures		✓	✓		
10	Watering is provided during material delivery and processing		✓	✓		
11	Any adjacent areas are damaged due to spoil ground, restored to its original state		✓	✓		
12	River banks are protected from materials or temporary stockpiles of the contractor		✓			
13	Negative effects or violations due to construction works are controlled with permissible level according to standards		✓			
14	Access roads to borrow pits, and also borrow pits, quarries and traffic operations are maintained by approved standards		✓	✓		

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
15	Water discharge and removal, avoiding flooding or damaging to other works or service causing erosion		✓			
<b>Flora and Fauna</b>						
1	Trees and shrubs outside of construction site, but on road reserve are generally preserved from damages					There are no trees on construction site territory
2	Ancient trees have not cut during construction works					There are no ancient trees on construction site territory
3	Cutting off has not taken place without the prior permission of relevant local authorities					No trees
4	Trees or shrubs cut or removed only if they interfere for necessary temporary or permanent works					No trees
5	Construction works are stopped on bridge sites during harvest period (indicate yes or no to construction activities, indicate date)		✓			Bridge construction does not affect to cultivation and harvesting, because they are located on far places

### Environmental monitoring checklist

Lot 6 site inspection checklist		
Site visiting date: 18.12.2019	Engineer's Representative: Environmental specialist Novossadova N.	Engineer's ref. No.
Time: 12:00	Contractor's Representative: Gulzhanat Zhantokova – Environmental specialist	Contractor's ref. No.

Weather condition: clear, +2 C°, south wind with speed 3 m/s		
Work is in progress:	Milling of the existing road pavements on Lot 6 site, soil compaction, asphalt pavement construction	
Issues related to environment	Possible reasons	Proposed mitigation measures
Too much dust on the road	Hot weather condition and soil characteristics, also insufficient watering of the road could be a reason	To increase number of water trucks and to intensify the watering near to villages

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
Contractor's base camp						
1	Septic tanks are installed and cleaned according to approved procedures	✓				An agreement was concluded with a specialized company for waste disposal
2	All effluents flow to septic tanks or to reservoirs for construction water	✓				
3	All hazardous liquids are collected on non-permeable facilities at designated area	✓				
4	Solid hazardous materials are stored on designated safe places at work areas	✓				There are safety signs
5	Effluents are collected in drain system and disposed by the Contractor	✓				
6	All vehicle drive in and out the base camp are controlled	✓		✓		Road Safety specialist and mechanic are controlling this work

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
7	Local communities and organizations are informed about construction schedule and any noisy activities on a regular basis through workers and by other activities	✓		✓		The Contractor attends at a monthly meetings in Zhamansor Akimat
8	Open containers for material storage are covered with canvas	✓		✓		Place was chosen for storage with the further disposal
9	Open fire is prohibited	✓		✓		No open fire neither on site nor base camp
10	Fire-fighting equipment <ul style="list-style-type: none"> <li>▪ Sand bucket and shovel</li> <li>▪ Foam fire extinguisher</li> <li>▪ Fire blanket in the canteen</li> </ul>	✓		✓		
11	Entering of strangers to base camp is prohibited by installing fencing and security	✓		✓		There is a security man and checkpoint at the base camp entrance
12	All employees provided with personal protective equipment (PPE)	✓		✓		Not all employees provided
13	Smoking is prohibited except smoking places	✓		✓		There are smoking places on base camp territory
14	Relevant road signs and warning signs are installed on site and at unsafe areas	✓		✓		Road Safety Plan have been preparing
15	Drinking water is provided by commercial and licensed sources for all employees	✓		✓		
16	Safety clothes of all employees are washed every day	✓				Safety clothes of employees are washed as necessary

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
17	All employees are provided with three time meal per day	✓				Local residents have lunch only as they do not work on rotation. It does not breach the Labor Code of the RK.
18	Canteen with sanitary and hygienic conditions on camp	✓				
19	Medical facility and first aid kit on camp and on work areas	✓		✓		First aid kits are replenished as necessary. Logbook for medical facility visit is maintained
20	All employees health is under control of base camp doctor, and appropriate services are provided, also a monthly health checks	✓		✓		Daily pre-work check-up of employees are arranged in medical facility and logbook for daily health check-up (sobriety test, blood pressure and etc.) is maintained.
21	All territory are clean, there is no any waste, except special places for waste disposal	✓		✓		Base camp is being constructed
22	Provision of rest area on camp	✓				Rest areas, rest rooms
23	Child labour (younger than 15 year)		✓			Not observed
<b>Production site</b>						
1	Liquid wastes from Asphalt Plant are stored in a tank and disposed by vacuum vehicle Liman ≤MTTSTH≥		✓	✓		
2	Solid wastes from Asphalt Plant are stored at designated area and disposed per approved procedures		✓			Plants are not installed

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
3	The plant area is covered by gravel in order to reduce a dusting		✓	✓		It is being eliminated
4	The plant area is watered in order to reduce a dusting		✓	✓		Documents have been preparing in order to receive permits
5	Plant can not discharge effluents to any area; non-permeable concrete basins will be constructed for such purpose		✓	✓		Permanent control by the Contractor's environmental specialist
6	All employees of Asphalt concrete and Crusher Plants are supplied with dust masks	✓				
7	All employees at Asphalt Plants are wearing dust masks	✓				
8	Sand and crushed stone for concrete and asphalt are stored on wet and covered place					No work
9	There is a fire fighting equipment in Asphalt Plant		✓	✓		It is included in the EMP and Fire Safety
10	Plant or equipment with high vibration are installed properly, maintained and operated correctly		✓	✓		It is being installed
<b>Fuel station</b>						
1	Oil filling will be strictly controlled and is permitted only at the fuel filling station and on workshop area	✓		✓		
2	Fuel tank storage area is fenced and it is a non-permeable, tank's roof is closed	✓		✓		It is being constructed
3	Fuel station, which provided with fire fighting equipment, is checked every week		✓	✓		

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
4	There is the warning signs at fuel station		✓		✓	
5	Fuel station is provided with wastebasket		✓			
<b>Contractor's Workshop and Car Wash</b>						
1	Liquid hazardous materials are stored in designated area at the workshop		✓	✓		Arranged a special concreted areas to keep a hazardous materials and installed a fence
2	Solid hazardous materials are stored in designated area at the workshop		✓	✓		
3	There are containers for used oils and hydraulic liquids	✓		✓		
4	Used oil products are collected in concrete tank with a volume up to 110% and tank is cleaned according to approved procedures		✓	✓		
5	Workshop is provided with drainage system		✓	✓		It is being constructed
6	Every vehicle is inspected and maintained on a regular basis	✓		✓		To strengthen daily control of special machinery
7	All construction vehicles meet Euro standards and are equipped with modern noise control equipment		✓	✓		
8	Noise control equipment of all vehicles is maintained and checked as per the approved procedures		✓	✓		
9	All workshop workers are provided with welding equipment and personal protective equipment	✓		✓		

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
10	All construction water is collected in concrete tank and cleaned as per the approved procedures		✓	✓		
<b>Project Road</b>						
1	All roads, where planed construction works, are watered by water trucks	✓		✓		To increase watering time and water truck number during rain-free period and to take special control the sites near to villages
2	There are structures for passage of cattle, sheep and other animals on appropriate places of the project road		✓		✓	
3	Culvert and bridge construction areas are provided with safety ribbons and wringing signs	✓				
4	Fencing and checkpoint are installed at all work areas where necessary		✓		✓	
5	Waste storage for any kind as well as machinery or vehicles parking is not permitted within a distance of 100m from any facility (including drainage or irrigation facilities)	✓		✓		
6	All appropriate road signs and warning signs are provided on work sites and unsafe areas	✓		✓		
7	Construction vehicle and plants are maintained properly to reduce gas emissions	✓		✓		To strengthen control over special machinery
8	Noise control measures at special areas	✓		✓		

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
Borrow pits during monitoring there was no work at borrow pits						
1	Temporary drainage is provided at borrow pits and quarries			✓		
2	Construction work is stopped between 10.00 p.m. and 6.00 a.m. at 200m from the nearest habitation			✓		There is no any close village
3	Stockpiles do not exceed 3m in height			✓		
4	All vehicles with an open body are used for transportation of materials with possible dusting, designed for these purposes with a well-chosen convertible body			✓		
5	During construction works all noise volume is reduced according to the national standards			✓		
6	Materials with possible dusting are not loaded higher than convertible body level and covered with clean canvas			✓		Operators and recorders monitor the level of soil loading
7	All vehicles, equipment and plant meet Euro standards for exhaust gas emissions		✓	✓		
8	All temporary acquired land is rehabilitated		✓			After completion of construction works
9	All material residues and contaminated sites are collected and disposed accordance with approved procedures		✓	✓		
10	Watering is provided during material delivery and processing		✓	✓		

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
11	Any adjacent areas are damaged due to spoil ground, restored to its original state		✓	✓		
12	River banks are protected from materials or temporary stockpiles of the contractor		✓			
13	Negative effects or violations due to construction works are controlled with permissible level according to standards		✓			
14	Access roads to borrow pits, and also borrow pits, quarries and traffic operations are maintained by approved standards		✓	✓		
15	Water discharge and removal, avoiding flooding or damaging to other works or service causing erosion		✓			
<b>Flora and Fauna</b>						
1	Trees and shrubs outside of construction site, but on road reserve are generally preserved from damages					There are no trees on construction site territory
2	Ancient trees have not cut during construction works					There are no ancient trees on construction site territory
3	Cutting off has not taken place without the prior permission of relevant local authorities					No trees
4	Trees or shrubs cut or removed only if they interfere for necessary temporary or permanent works					No trees

No	Environmental safeguard measures	Executed		In process		Comments
		Yes	No	Yes	No	
5	Construction works are stopped on bridge sites during harvest period (indicate yes or no to construction activities, indicate date)		✓			Bridge construction does not affect to cultivation and harvesting, because they are located on far places

## Site inspection act Contract 004-ADB/CW-2018

### Site inspection act by the Contract 004-ADB/CW-2018, Company “Shanghai Construction Group Co. Ltd.”

October 31, 2019

Sagiz village

We, the undersigned, including S.Kurzhumova, representative of “NC “KazAutoZhol” JSC Atyrau branch, Cha Joon Dae, Construction Supervision Consultant Team Leader “Dongsung Engineering”, Zh.Kurmangaliyev, Engineer of PMC “NC “KazAutoZhol” JSC, A.Zeinullina, Environmental and Social safeguards specialist, Y.Rakhiyev, Deputy Resident Engineer of “ZS Engineering” LLP and A.Kairedenov, Deputy Project Manager of Contractor “Shanghai Construction Group Co. Ltd.”, conducted the site inspection on Lot-4 of the Road «Aktobe-Atyrau-border RF (to Astrakhan)» km 330-370, “CAREC Corridors 1 and 6 Connector Road 'Aktobe-Makat' Reconstruction Project” and recorded the following:

#### 1. Work Progress:

- Roadbed embankment filling totally – **384 thou.m<sup>3</sup>**. Balance – **817 thou.m<sup>3</sup>**.
- Construction of additional layer of sand-gravel mix – **11 km**. Balance – **29 km**.
- Construction of base course of crushed stone-sand mix C-10 totally – **5,6 km**. Balance – **34,4 km**.
- Upper base course of crushed stone-sand-cement mix C-1 (h=0,15m) totally – **1,5 km**. Balance – **38,5 km**.
- Construction of binder course of hot porous coarse-grained asphalt concrete mix brand I (0,10m) not started.

#### 2. Mobilization of equipment and personnel:

- Personnel mobilization – 254 people, plan for 2019 – 266 people.
- Equipment mobilization – 171 nos, plan for 2019 – 190 nos.

#### 3. During the inspection, the following progress delays and issues of concern have been identified:

- Culvert construction at the main road, completed - 4 nos. Installation of 6 nos are on progress. Balance – 10 nos.
- Aggregate materials delivery: plan for 2019 – **138 thous.m<sup>3</sup>**, delivered – **78 thous.m<sup>3</sup>**. Balance – **60 thous.m<sup>3</sup>**.
- Slow progress on Sagiz and Nogaity bridges (there are no work except disassembly of upper elements of existing structures).

#### 4. Environment Management Plan

Instrumental monitoring is carried out quarterly by the licensed company “Econormativ” LLP based on the agreement No.SCGK2-2608 dated August 26, 2019. Baseline monitoring has been conducted before the starting of construction works in September 2019, emissions are within allowance level.

**Waste and effluent management.** The Contractor signed the agreement for solid waste disposal with company “West Dala” LLP No.377-2019 dated 30.09.2019. There are septic tank for effluents and containers for temporary storage of solid waste in the base camp territory. Places for collection of garbage and waste are arranged in accordance with the Sanitary rules of the RK.

**Grievance mechanism.** Grievance mechanism is proceeded. Boxes for complaints are installed in production base Sagiz. There are boards on the sites of “Aktobe-Makat” reconstruction project, showing numbers of hot line for issues of social and living conditions in the construction camps.

The result of interviewing with employees showed that they are satisfied with working conditions and sanitary standards of living conditions. Complaints and requests from the employees and local people have not been registered.

#### 5. Health and Safety

Daily trainings on safety and road safety are conducted with all staff, including the drivers, operators of special equipment before starting a work.

Monthly explanatory talk are held with the staff at the workplaces about the rules and compliance with safety rules and safe working methods.

The Contractor is recommended:

- to arrange portable pallets under fuel materials;
- to install information boards and direction signs.

#### ***Fire Safety***

There are fire shields and extinguishers on the territory of production base and residential area. All employees of organization must undergo fire prevention training.

#### ***Safety cloth and PPE (as of inspection time)***

Number of given safety clothes – 242, among them 53 are for winter.

Number of given safety shoes – 233 pairs.

Number of given safety vests – 295.

Number of given caps – 23.

Number of given helmets – 191.

Number of given respirators – 70.

Number of given safety glasses – 70.

Number of given anti-noise earplugs – 23.

#### ***Road Safety***

The Traffic Management Plan was submitted by the Contractor on 14.03.2019 and approved by the Engineer on 26.03.2019.

Contractor's letter No. SCG-KZAR-CS-163 dated 14.03.2019.

Engineer's letter No. DSE-AM-2-1222 dated 02.07.2019.

Bypass road traffic management scheme was agreed by RSE "Atyrauhollaboratory" and Atyrau regional Traffic Police on 27.02.2019.

Total length of ready and opened for traffic bypass road is 39,7 km. The width of bypass road meets the requirement and it is 9 m.

Signal man and control man are 4 people.

All employees of company including the drivers and operators must undergo a medical check-up before starting a work and driving.

Temporary road signs and signal posts are installed in accordance with the scheme approved by Atyrau regional Traffic Police and ST RK 2607-2015.

#### ***Currently and emergency maintenance of bypass road***

9 water trucks are used for dust control. Site is cleared from garbage on time.

Bypass road condition is unsatisfactory for the inspection time, it is necessary to do pothole patching work, levelling and compaction.

## **6. Social and living conditions**

Focusing on the followings: inclusion of basic labor standards, labor legislation, according to labor safety regulations used in production, practice of payment for labor between man and woman, child labor in construction and repair works, inspection the lack of obliged or compulsory labor and discrimination of employees and etc. After site inspection, interview was with the Contractor's representative in order to verify our inspection. Conclusion summary is as follows:

- Basic labor standards: personnel work in one shift during the warm time. Personnel are accommodated from 2 to 4 people in the living rooms. A dormitory is designed for men, women live in Sagiz village. The Contractor installed air conditioning system with a cold condition for hot season and with a warm condition for cold season.

In order to improve sanitary conditions, the Contractor is recommended to do the following:

- to arrange a drying room in the laundry;
- to make wider a canteen;
- to divide the dishing out place and pre-washing place;
- to install a hanger in the canteen;
- to divide the eating place and food storage;
- to arrange a place for storage of outdoor clothes and shoes by dividing living area.

- **Same right of men and women on payment for labor:** women on the site are involved by the company for food and household services (12 people) and engineering office department (9 people). Wage is determined according to the qualification data. Interview with women showed that they are satisfied with the employee benefits and wage rate.
- **Child labor:** in accordance with article 4 of Labor legislation of the RK, a person younger than 18 is a minor. To date the Contractor has not hired children to work on and off the site. The age of employees is strictly checked by the Contractor during employment and there is a file for each employee in the Contractor's office.
- **Discrimination of employees:** in accordance with clause 7.2 of Labor legislation of the RK, discrimination regarding gender and colour is not allowed. Citizens of Kazakhstan and China are working on construction site. Food is same and office is shared by all employees in the camp, regardless of gender, nationality and region.
- **Employment of local people:** information on hired personnel number is attached to the act.

**Head of Quality Control Department**

**“NC “KazAutoZhol” JSC Atyrau branch**      //signature//      **S.Kurzhumova**

**Team Leader**

**Dongsung Engineering**      //signature//      **Cha Joon Dae**

**Engineer**

**PMC “NC KazAutoZhol” JSC**      //signature//      **Zh.Kurmangaliyev**

**Environmental and social  
safeguards specialist**

**PMC “NC KazAutoZhol” JSC**      //signature//      **A.Zeinullina**

**Deputy Resident Engineer**

**“ZS Engineering” LLP**      //signature//      **Y. Rakhiyev**

**Deputy Project manager of the Contractor**

**“Shanghai Construction Group Co. Ltd”**      //signature//      **A.Kairedenov**

Shanghai Construction Group Co., Ltd. in Kazakhstan

Atyrau region, Kyzylkoga district, Sagiz village LOT 4 as of 31.10.2019

Total number of employees	254		
Foreign personnel	19		
Total number of employees involved from another regions of Kazakhstan	96		
Total number of employees involved from Atyrau region	139		
Total number of employees involved from Atyrau region / Kyzylkoga district, Sagiz village	74		
Among them men	191		
Among them women	21	service personnel	engineering office
		12	9

Deputy Project Manager     *//signature and stamp//*     Kairedenov A.K.

## Site inspection act Contract 005-ADB/CW-2018

### Site inspection act by the Contract 005-ADB/CW-2018, Company “Shanghai Construction Group Co. Ltd.”

October 31, 2019

Mukur village

We, the undersigned, including S.Kurzhumova, representative of “NC “KazAutoZhol” JSC Atyrau branch, Cha Joon Dae, Construction Supervision Consultant Team Leader “Dongsung Engineering”, Zh.Kurmangaliyev, Engineer of PMC “NC “KazAutoZhol” JSC, A.Zeinullina, Environmental and Social safeguards specialist, T.Kushekov, Deputy Resident Engineer of “ZS Engineering” LLP and A.Murzagaliyev, Project Manager of Contractor “Shanghai Construction Group Co. Ltd.”, conducted the site inspection on Lot-5 of the Road «Aktobe-Atyrau-border RF (to Astrakhan)» km 370-418, “CAREC Corridors 1 and 6 Connector Road 'Aktobe-Makat' Reconstruction Project” and recorded the following:

#### 1. Work Progress:

- Roadbed embankment filling. Totally – **276,008 thou.m<sup>3</sup>**. Balance – **855,753 thou.m<sup>3</sup>**.
- Construction of additional base layer. Totally – **6,62 km**. Balance – **41,59 km**.
- Construction of lower base course of crushed stone-sand mix C-10. Totally – **4,0 km**. Balance – **44,21 km**.
- Upper base course of crushed stone-sand-cement mix. Totally – **0 km**. Balance – **48,21 km**.
- Construction of binder course of hot porous coarse-grained asphalt concrete mix. Totally – **0 km**. Balance – **48,21 km**.

#### 2. Mobilization of equipment and personnel:

- Personnel mobilization – 161 people, plan for 2019 – 287 people.
- Equipment mobilization – 122 nos, plan for 2019 – 146 nos.

#### 3. During the inspection, the following progress delays and issues of concern have been identified:

- not completed culvert construction at the main road, balance - 19 nos;
- not started construction of upper base course of crushed stone-sand-cement mix;
- not started construction of binder course of hot porous coarse-grained asphalt concrete mix;
- weak delivery of aggregate materials: plan for 2019 – **390,220 thous. tons**, delivered – **86,436 thous. tons**. Balance – **303,786 thous. tons**.
- not received permits for soil extraction from borrow pits (there is a permit for exploration);
- construction water supply is not enough;
- not installed Mixing Plant and Asphalt Plant;
- not completed a laboratory on site;
- not solved a issue of railway dead-end;
- significant delay from Work Schedule causes a failure to meet the contractual deadlines.

#### 4. Environment Management Plan

Instrumental monitoring is carried out monthly by the licensed company “Econormativ” LLP based on the agreement No.211/3/AZHK dated 04.07.2019. Noise and vibration measurements are carried out by a laboratory of the Ministry of healthcare of the Republic of Kazakhstan, branch of Republican State Enterprise “National Expertise Centre”, Public Healthcare Committee of Atyrau region. Baseline monitoring has been conducted before the starting of construction works on 07.07.2019, emissions are within allowance level.

##### *Waste and effluent management*

The Contractor signed the agreements for solid waste disposal with an Individual Enterprise “Kabulov” No.07/2019 dated 06.03.2019 and for production waste with “West Dala” LLP No.377-2019 dated July 1, 2019, also for liquid waste disposal service with “ZapKazService” LLP No.247/Z/AZHK dated July 1, 2019. Places for temporary storage of waste on the base territory are arranged according to the requirements and regulations. Production waste is collected and stored in the landfills of IE “Kabulov” and “ZapKazService”

LLP. Containers for temporary storage of solid waste are installed on the special precast concrete plates and covered by metal lids.

During the inspection of production base, there was a dirtiness of site by production waste (used tires, steel bars and etc.). The Contractor is recommended to arrange a place for temporary storage of production waste in accordance with the Sanitary rules of the RK.

***Grievance mechanism***

Grievance mechanism is proceeded. Boxes for complaints are installed in base camp and production base Sagiz. There are boards on the sites of “Aktobe-Makat” reconstruction project, showing numbers of hot line for issues of social and living conditions in the construction camps. Complaints and requests from the employees and local people have not been registered.

**5. Health and Safety**

Daily trainings on safety and road safety are conducted with all staff, including the drivers, operators of special equipment before starting a work.

Monthly explanatory talk are held with the staff at the workplaces about the rules and compliance with safety rules and safe working methods.

There are spills on the temporary fuel storage area.

The Contractor is recommended:

- to concrete the temporary fuel storage area.
- to arrange portable pallets under fuel materials;
- to install information boards and direction signs.

***Fire Safety***

There are fire shields and extinguishers on the territory of production base and residential area. All employees of organization must undergo fire prevention training.

***Safety cloth and PPE (as of inspection time)***

Number of given safety clothes – 78.

Number of given safety shoes – 78 pairs.

Number of given safety vests – 78.

Number of given respirators – 25.

Number of given safety glasses – 78.

Number of given anti-noise earplugs – 15.

***Road Safety***

The Traffic Management Plan was submitted by the Contractor on 01.03.2019 (by the letter No.SCG-KZAR-CS-058 dated 01.07.2019) and approved by the Engineer on 02.07.2019 (by the letter No.DSE-AM-2-1222 dated 02.07.2019).

Bypass road traffic management scheme was agreed by Atyrau regional Traffic Police on 20.06.2019. There are temporary road signs with a yellow background and signal posts according to the scheme approved by Atyrau regional Traffic Police on June 20, 2019 on the entire length of bypass road. Traffic violation facts by the drivers on site have not been recorded.

Total length of ready and opened for traffic bypass road is 48,459 km. The width of bypass road meets the requirement and it is 9 m.

Traffic control activities are carried out at construction workplaces regularly.

Signal man and control man are 2 people.

All employees of company including the drivers and operators must undergo a medical check-up before starting a work and driving.

***Currently and emergency maintenance of bypass road***

4 water trucks are used for dust control. Site is cleared from garbage on time, road signs are cleaned. Traffic of transit transports are provided on the entire length of bypass road.

Bypass road condition is in average level of satisfaction for the inspection time, it is required to do levelling regularly, also pothole patching work is necessary. And there is an increased dustiness. It is necessary to do watering of bypass road on time.

**6. Social and living conditions**

Focusing on the followings: inclusion of basic labor standards, labor legislation, according to labor safety regulations used in production, practice of payment for labor between man and woman, child labor in

construction and repair works, inspection the lack of obliged or compulsory labor and discrimination of employees and etc. After site inspection, interview was with the Contractor's representative in order to verify our inspection. Conclusion summary is as follows:

- **Basic labor standards:** personnel work in one shift during the warm time by the rotation system (15/15, 24/6). Personnel are accommodated from 2 to 5 people in the living rooms. Men and women live in the dormitory, some of them live in Mukur village. The Contractor installed air conditioning system with a cold condition for hot season and with a warm condition for cold season.  
 In order to improve sanitary conditions, the Contractor is recommended to do the following:
  - to increase lighting in accommodations;
  - to arrange accommodations in accordance with the Sanitary rules of RK;
  - to speed up progress of heating system arrangement in residential camp;
  - to provide a hot and cold water in accommodations.
- **Same right of men and women on payment for labor:** women on the site are involved by the company for food and household services (7 people) and engineering office department (3 people).  
 Wage is determined according to the qualification data. Interview with women showed that they are satisfied with the employee benefits and wage rate.
- **Child labor:** in accordance with article 4 of Labor legislation of the RK, a person younger than 18 is a minor. To date the Contractor has not hired children to work on and off the site. The age of employees is strictly checked by the Contractor during employment and there is a file for each employee in the Contractor's office.
- **Discrimination of employees:** in accordance with clause 7.2 of Labor legislation of the RK, discrimination regarding gender and colour is not allowed. All employees are citizens of Kazakhstan working on construction site. Food is same and office is shared by all employees in the camp, regardless of gender, nationality and region.
- **Employment of local people:** information on hired personnel number is attached to the act.

**Head of Quality Control Department**

**"NC "KazAutoZhol" JSC Atyrau branch**      //signature//      **S.Kurzhumova**

**Team Leader**

**Dongsung Engineering**      //signature//      **Cha Joon Dae**

**Engineer**

**PMC "NC KazAutoZhol" JSC**      //signature//      **Zh.Kurmangaliyev**

**Environmental and social  
safeguards specialist**

**PMC "NC KazAutoZhol" JSC**      //signature//      **A.Zeinullina**

**Deputy Resident Engineer**

**"ZS Engineering" LLP**      //signature//      **T.Kushekov**

**Project manager of the Contractor**

**"Shanghai Construction Group Co. Ltd"**      //signature//      **A.Murzagaliyev**

Shanghai Construction Group Co., Ltd. in Kazakhstan

Atyrau region, Kyzylkoga district, Mukur village LOT 5 as of 31.10.2019

Total number of employees	161		
Foreign personnel	0		
Total number of employees involved from another regions of Kazakhstan	89		
Total number of employees involved from Atyrau region	72		
Total number of employees involved from Atyrau region / Kyzylkoga district, Sagiz village	15		
Among them men	151		
Among them women	10	service personnel	engineering office
		7	3

Project Manager LOT 5    *//signature and stamp//*    Murzagaliyev A.S.

Shanghai Construction Group Co., Ltd. in Kazakhstan

Atyrau region, Kyzylkoga district, Mukur village LOT 5 as of 31.10.2019

**Safety clothes and PPE (as of inspection time):**

No.	Item	Unit of measurement	Quantity
1	Safety clothe	set	78
2	Safety shoes	pairs	78
3	Safety vests	nos.	78
4	Safety helmet	nos.	78
5	Respirator	nos.	25
6	Safety glasses	nos.	78
7	Anti-noise earplugs	nos.	15

Safety Engineer //signature// Ermukhanov A.

## Site inspection act Contract 006-ADB/CW-2018

### Site inspection act by the Contract 006-ADB/CW-2018, Company JV “Akkord / Ak zhol kurylys”

November 1, 2019

Zhamansor village

We, the undersigned, including S.Kurzhumova, head of quality control department of “NC “KazAutoZhol” JSC Atyrau branch, Cha Joon Dae, Construction Supervision Consultant Team Leader “Dongsung Engineering”, Zh.Kurmangaliyev, Engineer of PMC “NC “KazAutoZhol” JSC, A.Zeinullina, Environmental and Social safeguards specialist, S.Tazabekov, Deputy Resident Engineer of “ZS Engineering” LLP and N.Zholdybayev, Project Manager of Contractor JV “Akkord / Ak zhol kurylys”, conducted the site inspection on Lot-6 of the Road «Aktobe-Atyrau-border RF (to Astrakhan)» km 418-458, “CAREC Corridors 1 and 6 Connector Road 'Aktobe-Makat' Reconstruction Project” and recorded the following:

#### 1. Work Progress:

- Roadbed embankment filling totally – **384,845 thou.m<sup>3</sup>**. Balance – **148,981 thou.m<sup>3</sup>**.
- Construction of additional layer of SGM – **14,0 km**. Balance – **12,5 km**.
- Construction of lower base course of crushed stone-sand mix – **9,9 km**. Balance – **16,5 km**.
- Construction of upper base course of crushed stone-sand-cement mix – **2,9 km**. Balance – **23,4 km**.
- Binder course – **1,07 km**. Balance – **25,13 km**.
- Culverts – **10 nos**. Balance – **1 no**.

#### 2. Mobilization of equipment and personnel:

- Personnel mobilization – 180 people, plan for 2019 – 221 people.
- Equipment mobilization – 101 nos, plan for 2019 – 132 nos.

#### 3. During the inspection, the following progress delays and issues of concern have been identified:

- significant delay from Work Schedule due to insufficient number of equipment (dump truck) and experienced specialists;
- weak organization and pace of work;
- late commencement of Mixing Plant (since 18.10.2019) and Asphalt Plant (since 28.10.2019).

#### 4. Environment Management Plan

Instrumental monitoring is carried out quarterly by the licensed company “Analytical laboratory on environmental protection” LLP based on the agreement No.17-19 dated January 17, 2019. Baseline monitoring has been conducted before the starting of construction works in June 2019, emissions are within allowance level.

**Waste and effluent management.** The Contractor signed the agreements for solid waste and production waste disposal with an Individual Enterprise “Kabulov” No.07/2019 dated 05.03.2019 and effluent disposal is carried out by “ZapKazService” LLP No.247/Z/AZHK dated July 1, 2019.. There are septic tank for effluents and containers for temporary storage of solid waste in the production base territory. Places for collection of garbage and production waste are arranged in accordance with the Sanitary rules of the RK.

**Grievance mechanism.** Grievance mechanism is proceeded. Boxes for complaints are installed in the territory of production base Zhamansor. There are boards on the sites of “Aktobe-Makat” reconstruction project, showing numbers of hot line for issues of social and living conditions in the construction camps.

The result of interviewing with employees showed that they are satisfied with working conditions and sanitary standards of living conditions. Complaints and requests from the employees and local people have not been registered.

## 5. Health and Safety

Daily trainings on safety and road safety are conducted with all staff, including the drivers, operators of special equipment before starting a work.

Monthly explanatory talk are held with the staff at the workplaces about the rules and compliance with safety rules and safe working methods.

The Contractor is recommended:

- to arrange portable pallets under fuel materials;
- to install information boards and direction signs.

### **Fire Safety**

There are fire shields and extinguishers on the territory of production base and residential area. All employees of organization must undergo fire prevention training.

### **Safety cloth and PPE (as of inspection time)**

Safety clothes are provided fully on the site. Number of safety clothes and PPE given for this month is shown below:

Number of given safety clothes – 20 sets for winter.

Number of given safety shoes – 20 pairs.

Number of given safety vests – 40.

Number of given respirators – 40.

Number of given safety glasses – 20.

### **Road Safety**

The Traffic Management Plan was submitted by the Contractor on 24.06.2019 and approved by the Engineer on 26.06.2019.

Contractor's letter No. AA-156-2019 dated 24.06.2019.

Engineer's letter No. DSE-AM-2-1202 dated 26.06.2019.

Bypass road traffic management scheme was agreed by RSE "Atyrauhollaboratory" and Atyrau regional Traffic Police on 20.06.2019.

Total length of ready and opened for traffic bypass road is 40 km. The width of bypass road meets the requirement and it is 9 m.

Signal man and control man are 3 people.

All employees of company including the drivers and operators must undergo a medical check-up before starting a work and driving.

Temporary road signs and signal posts are installed in accordance with the scheme approved by Atyrau regional Traffic Police and ST RK 2607-2015.

### **Currently and emergency maintenance of bypass road**

6 water trucks are used for dust control. Site is cleared from garbage on time.

Bypass road condition is satisfactory; pothole patching work, levelling and compaction have been conducting regularly.

## 6. Social and living conditions

Focusing on the followings: inclusion of basic labor standards, labor legislation, according to labor safety regulations used in production, practice of payment for labor between man and woman, child labor in construction and repair works, inspection the lack of obliged or compulsory labor and discrimination of employees and etc. After site inspection, interview was with the Contractor's representative in order to verify our inspection. Conclusion summary is as follows:

- **Basic labor standards:** Food, accommodation and sanitary-living conditions arranged by the Contractor in the base camp are met the requirements. Personnel work in two shifts by rotation system (15/15, 6/1). Personnel are accommodated from 2 to 6 people in the living rooms.  
The Contractor installed air conditioning system with a cold condition for hot season and with a warm condition for cold season. Men and women live in the dormitory, some of women live in Zhamansor village.  
The inspection result showed that there are no curtains in the dormitory, the Contractor is recommended to install curtains.
- **Same right of men and women on payment for labor:** women on the site are involved by the company for food and household services (10 people) and engineering office department (5 people).

Wage is determined according to the qualification data. Interview with women showed that they are satisfied with the employee benefits and wage rate.

- **Child labor:** in accordance with article 4 of Labor legislation of the RK, a person younger than 18 is a minor. To date the Contractor has not hired children to work on and off the site. The age of employees is strictly checked by the Contractor during employment and there is a file for each employee in the Contractor's office.
- **Discrimination of employees:** in accordance with clause 7.2 of Labor legislation of the RK, discrimination regarding gender and colour is not allowed. All employees are citizens of Kazakhstan working on construction site. Food is same and office is shared by all employees in the camp, regardless of gender, nationality and region.
- **Employment of local people:** information on hired personnel number is attached to the act.

**Head of Quality Control Department**

**"NC "KazAutoZhol" JSC Atyrau branch**      //signature//      **S.Kurzhumova**

**Team Leader**

**Dongsung Engineering**      //signature//      **Cha Joon Dae**

**Engineer**

**PMC "NC KazAutoZhol" JSC**      //signature//      **Zh.Kurmangaliyev**

**Environmental and social  
safeguards specialist**

**PMC "NC KazAutoZhol" JSC**      //signature//      **A.Zeinullina**

**Deputy Resident Engineer**

**"ZS Engineering" LLP**      //signature//      **S.Tazabekov**

**Project manager of the Contractor**

**JV "Akkord / Ak zhol kurylys"**      //signature//      **N.Zholdybayev**

**“Ak zhol kurylys” LLP**

**Atyrau region, Makat district, Zhamansor village Lot-6 as of 01.11.2019**

Total number of employees	180		
Foreign personnel	0		
Total number of employees involved from another regions of Kazakhstan	78		
Total number of employees involved from Atyrau region	40		
Total number of employees involved from Atyrau region / Kyzylkoga district, Sagiz village	24		
Among them men	142		
Among them women	15	service personnel	engineering office
		10	5

Project Manager    //signature and stamp//    Zholdybayev N.