

# Environmental Monitoring Report

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Semiannual Report  
July – December 2017

## Loan 2671 & Grant 0218-KGZ: Power Sector Improvement Project

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## Abbreviations

ADB	Asian Development Bank
AMDA	Automated metering & data acquisition system
BA-EMR	Bi-annual environmental monitoring report
CAPS	Central Asian Power System
ChEHVN	Chui enterprise of high-voltage networks
CSR	Country Safeguards Review
EHVN	Enterprise of high-voltage networks
EMP	Environmental management plan
FOCL	Fiber optic communication line
IEE	Initial environmental examination
JAEHVN	Jalal-Abad enterprise of high-voltage networks
OJSC	Open joint stock company
KR	Kyrgyz Republic
NEGK	National Electric Grid of Kyrgyzstan
NEHK	National Energy Holding of Kyrgyzstan
NEHVN	Naryn enterprise of high-voltage networks
OJSC	Open type joint stock company
OPGW	Overhead Ground-wire
OshEHVN	Osh enterprise of High-voltage networks
PCBs	Polychlorinated biphenyls
PIU	Project implementation unit
SAEPF	State Agency for Environmental Protection and Forestry under the Government of the Kyrgyz Republic
SCIEM	State Committee for Industry, Energy, and Mining of the Kyrgyz Republic
SCADA	Supervisory control and data acquisition system
S-S	Substation
SSEMP	Site specific environmental management plan
TEHVN	Talas enterprise of high-voltage networks

## **I. INTRODUCTION**

1. This eighth bi-annual report on environmental monitoring, which covers the period of 1 July to 31 December 2017 for the Power Sector Improvement Project, was prepared in accordance with requirements of Initial Environmental Examination (IEE) developed in 2014, and approved by Asian Development Bank (ADB). The IEE received a positive conclusion from the State Environmental Expertise Unit of State Agency for Environmental Protection and Forestry (SAEPF) on 08.07.2014 (No. 04-01-28/205).

2. The objective of this bi-annual report on environmental monitoring is presenting the results of environmental monitoring during implementation of project activity for compliance with the requirements of the Environmental Management Plan (EMP).

3. According to the Safeguard Policy Statement of ADB (SPS, 2009), the Project is classified as Category B. Its potential adverse environmental impacts are site-specific. Implementation of the activities specified in the EMP/Site specific EMP (SSEMP) will mitigate the identified impacts.

### **1.1. Project Information**

#### **1.1.1. Goal of the Project**

4. The main goals of the project are:

- (i) To advance transparency and accountability of commercial transactions in the power sector through establishment of the automated metering and data acquisition system;
- (ii) To improve overall efficiency and reliability of Kyrgyz power supply system through rehabilitation and upgrading of substations, and communications system.

#### **1.1.2. Project description**

5. The project aims at: (i) upgrading of substations; and (ii) establishment of a Supervisory Control and Data Acquisition System (SCADA) to manage the system of energy equipment.

#### **1.1.3. Upgrading of substations**

6. Upgrading of substations through replacing dilapidated circuit breakers and instrument transformers that have reached the end of their economic lives, are technologically obsolete, or do not meet the accuracy requirement for regional power trade, will improve the reliability of the system.

7. Open Joint Stock Company (OJSC) National Electric Grid of Kyrgyzstan (NEGK) is implementing Upgrading of Substations, whereas in the field it is implemented by enterprises of high-voltage networks.

#### **1.1.4. Communications and supervisory control and data acquisition system (SCADA)**

8. Establishment of SCADA will connect seven major substations and the control centers via optical fiber. The system will allow improving overall efficiency and reliability of Kyrgyz power supply system and the Central Asian Power System (CAPS).

9. The Northern fiber optic communication line (FOCL) will be installed under Lot 2 of the project for connecting several substations and facilities in Bishkek city, and laying of fiber optic cable in Bishkek city.

10. According to the scope of work, FOCL will be installed for hanging on supports of transmission lines with a total length of 330 km in the following transmission lines:

- i. 220 kV Glavnaya – Chuiskaya (59.9 km);
- ii. 220 kV Chuiskaya – Bystrovka (39.4 km);
- iii. 220 kV Bystrovka – Ala-Archa (93.4 km);
- iv. 220 kV Ala-Archa – Frunzenskaya (108.8 km);
- v. 220 kV Glavnaya – Kara Balta (90.5,2 km);
- vi. 220 kV Kara Balta – Frunzenskaya (61.5 km);
- vii. 110 kV Glavnaya – Karagachovaya (8.3 km);
- viii. 110 kW Power and District Heating Plant (PDHP) Bishkek – Parkovaya (11.8 km);
- ix. 110 kV Parkovaya – Ala-Archa (7.8 km).

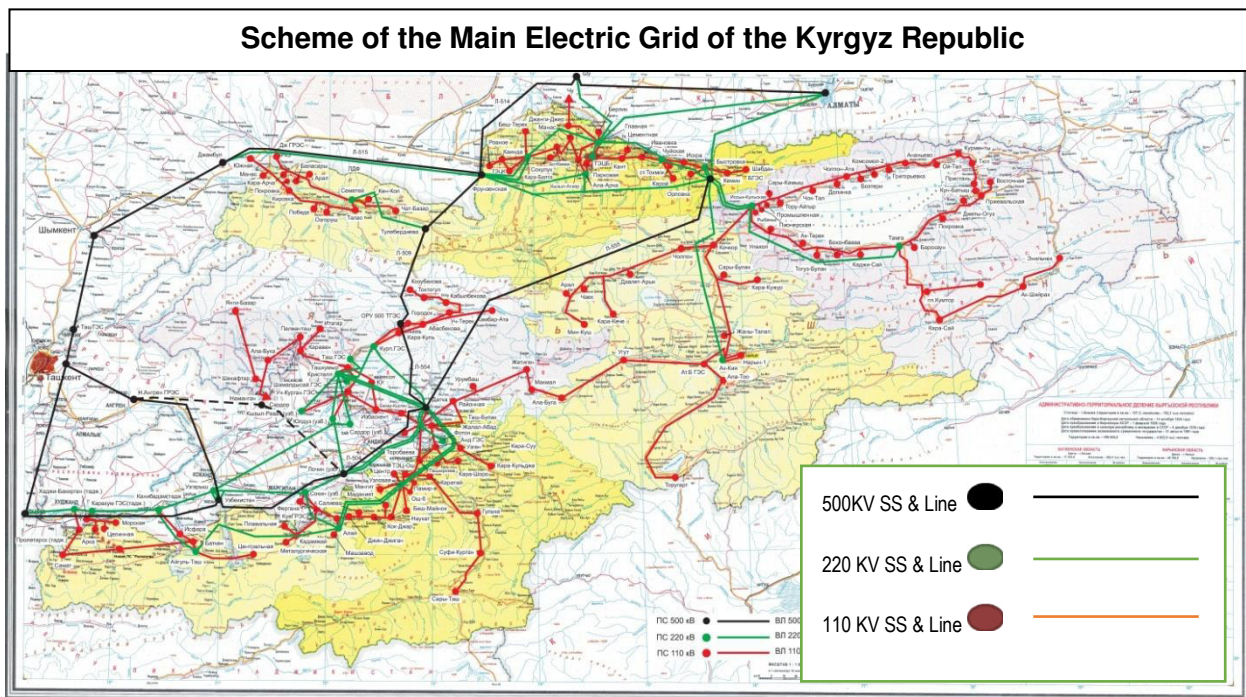
11. Laying of 16.2 km optical power ground wire in Bishkek city is carried out to connect the central control office (CCO) of NEGK to the main fiber-optic system. The following sections will be connected to the new telecommunication system by optical power ground wire (OPGW):

- ii. PDHP Bishkek – CCO/NEGK (6.2 km);
- iii. PDHP Bishkek – ChuPVES (Chui Enterprise of High-Voltage Networks) (4 km);
- iv. SS Karagachevaya – CCO/NEGK (6 km)

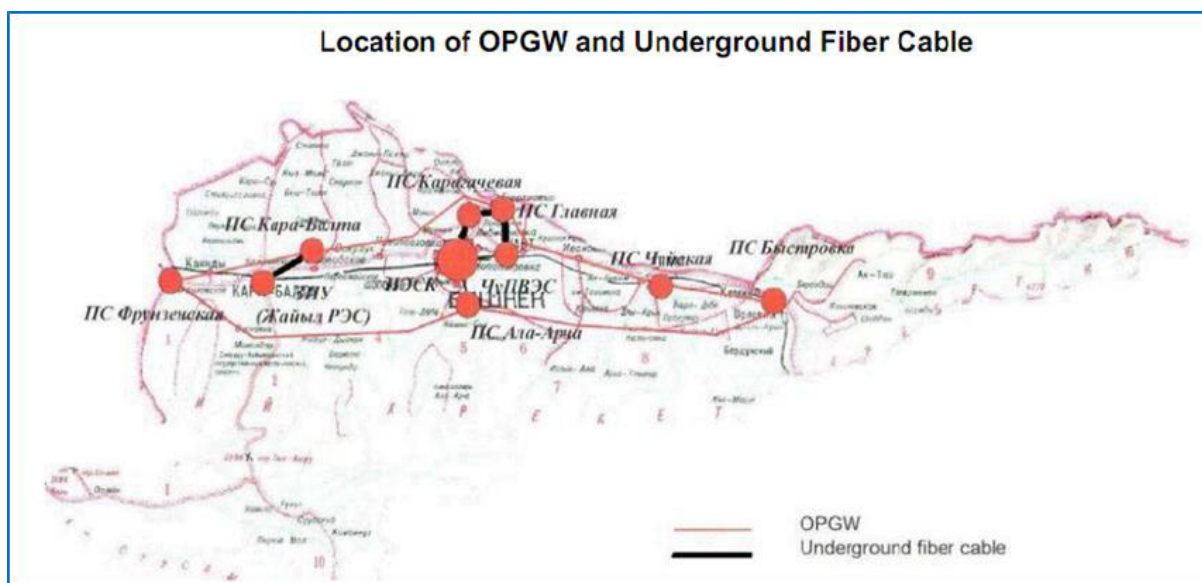
12. NEGK signed a contract with Contractor for implementation of this second component, AK-AY ELEKTRIK DIS TICARET KOLLEKTIF SIRKETI, in July 2015.

## **1.2. Project implementation area**

13. The project will be implemented at 107 substations in Chui, Issyk-Kul, Talas, Naryn, Osh and Jalal-Abad oblasts. Out of 107 substations, at 54 substations oil-filled equipment (oil switches, current and voltage transformers) will be replaced. Location of area for the implementation of Lot 1 is shown in Figure 1, for Lot 2 – see Figure 2.



**Figure 1.** Power Sector Improvement Project implementation area for Lot 1 “Upgrading of Substations”



**Figure 2.** Project implementation area for Lot 2 “Laying of fiber-optic communication line (SCADA) in Chui region”

### 1.3. Construction activities carried out during the reporting period

14. The contractor and NEGK worked according to the Project implementation Plan for the last six months from July to December 2017 including the following (Table 1):

Table 1. Project progress in July-December 2017

№	Month, 2017	Project Components and Activities
1	July	<p><b>Upgrading of substations:</b></p> <ul style="list-style-type: none"> <li>There was no change of equipment</li> </ul> <p><b>SCADA system:</b></p> <ol style="list-style-type: none"> <li>Laying out of optical fiber cable</li> </ol>

№	Month, 2017	Project Components and Activities
		<ul style="list-style-type: none"> <li>7.8 km of Parkovaya - Ala-Archa line</li> </ul>
2	August	<p><b><u>Upgrading of substations:</u></b></p> <ul style="list-style-type: none"> <li>There was no change of equipment</li> </ul> <p><b><u>SCADA system:</u></b></p> <ul style="list-style-type: none"> <li>There was no field work</li> </ul>
3	September	<p><b><u>Upgrading of substations:</u></b></p> <ul style="list-style-type: none"> <li>There was no change of equipment</li> </ul> <p><b><u>SCADA system:</u></b></p> <ul style="list-style-type: none"> <li>There was no field work</li> </ul>
4	October	<p><b><u>Upgrading of substations:</u></b></p> <ul style="list-style-type: none"> <li>Testing of transformer oil for Polychlorinated biphenyls (PCB) at substations of OshEHVN - 27 items of equipment at 19 sub-stations</li> <li>Replacing of oil-filled equipment – 27 items</li> </ul> <p><b><u>SCADA system:</u></b></p> <ul style="list-style-type: none"> <li>There was no field work</li> </ul>
5	November	<p><b><u>Upgrading of substations:</u></b></p> <ul style="list-style-type: none"> <li>There was no field work</li> </ul> <p><b><u>SCADA system:</u></b></p> <ul style="list-style-type: none"> <li>There was no field work</li> </ul>
6	December	<p><b><u>Upgrading of substations:</u></b></p> <p>There was no field work</p> <p><b><u>SCADA system:</u></b></p> <ul style="list-style-type: none"> <li>There was no field work</li> </ul>

Detailed information of activities and project implementation progress are described below.

### 1.3.1. **Upgrading of substations**

15. In October 2017, the testing of transformer oil for PCBs was continued. At 19 Substations of OshEHVN, 27 oil filled items of equipment were tested (oil testing information is in Table 3).

16. The works on replacing oil-filled equipment were carried out in October 2017. During the reporting period, 27 units of oil-filled equipment were replaced. The oil was drained from the circuit breakers on-site, and then transported from sub-stations to oil facilities, which are available at enterprises of high-voltage electrical networks (EHVNs). Current and voltage transformers are removed in oil-filled status and are transported also to EHVNs (Photo 1).



Photo 1. Works for replacing oil filled equipment at «Kara-Suu» Substation



17. Enterprises of High-voltage electrical networks (EHVN) constructed the sites for temporary storage of uncontaminated PCB equipment using their own resources and labor. Earth works/excavation and site leveling was not carried out.

### **1.3.2. Establishment of communications and supervisory control and data acquisition system (SCADA)**

18. Field works for laying optical fiber cable were carried out from July to August 2017, the work was carried out at 1 transmission line: Parkovaya – Ala-Archa, 7.8 km as it shown in Photos 2 and 3;



Photos 2 and 3. Works for laying optical fiber cable at HV power line Parkovaya – Ala-Archa, July 2017.

### **1.4. Project organization structure**

19. The Project's Executing Agencies are: National Energy Holding of Kyrgyzstan (NEHK), and OJSC National Electric Grid of Kyrgyzstan (NEGK) which is subordinate to the State Committee for Industry, Energy, and Mining (SCIEM) of the Kyrgyz Republic.

20. The State Committee for Industry, Energy, and Mining is responsible for:

- (i) development of capacity of NEGK regarding corporate and financial management, including development of business plan for NEGK;
- (ii) elaborating proposal for establishment of the settlement system for wholesale electricity supply transactions; and;
- (iii) supervising NEGK's project implementation performance.

21. NEGK is responsible for following activities:

- (i) installing communication system for recording electricity commercial consumption data, and collection of metering data through the national electric grid. This work

- includes installing meters and related equipment in substations of NEGK and facilities of electric power plants;
- (ii) rehabilitation of about 54 substations by replacing circuit breakers, and current and voltage transformers;
- (iii) installing communications and supervisory control and data acquisition system (SCADA) that includes the fiber-optic communication line that connects seven major NEGK substations and control centers;
- (iv) ensuring NEGK support in Project implementation management.

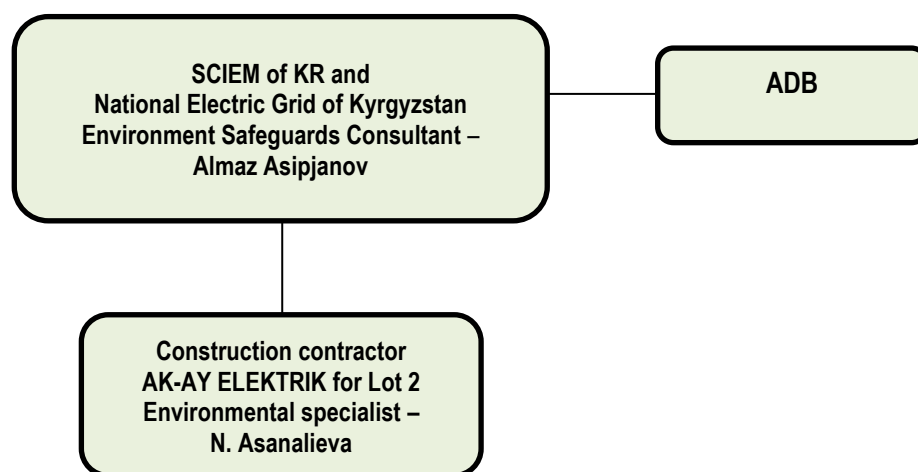
22. NEGK signed in July 2015 a Contract for Lot 2 and AMDA with AK-AY ELEKTRIK DIS TICARET KOLLEKTIF SIRKETI (Turkey).

23. In July 2016, AK-AY ELEKTRIK subcontracted the local company ChuiElectroStroy Ltd. for Lot 2 for auxiliary works while laying fiber-optic cable.

24. In December 2015, NEGK signed a Contract with International consultant – expert on SCADA and communications, and with national consultants: electrical engineer, and environment safeguards consultant (Taisia Neronova). However, Ms. Neronova left the project and Mr. Almaz Asipjanov resumed his duties from September, 2017.

25. NEGK Environment Safeguards Consultant is responsible for implementation of Environmental Management Plan (EMP) in accordance with ADB requirements during project implementation, and preparation of regular reports to ADB (twice a year).

### ***Organizational diagram of project implementation on Environmental Safeguards***



26. In May 2016 AK-AY ELEKTRIK recruited environmental specialist (Ms. Nazgul Asanalieva) for EMP monitoring during implementation of Component Lot 2: Establishment of communications and supervisory control and data acquisition system.

27. The contractor is responsible for implementation of EMP/SSEMP and compliance with environmental safeguards.

### **1.5. Relations with project implementation participants**

28. For successful implementation of EMP, Environment Safeguards Consultant has had regular consultations with ADB environment safeguards consultant (Malika Babadjanova): meetings, telephone discussions, and email communication.

29. In accordance with the contract between NEGK and AK-AY ELEKTRIK No. 22-16/0073 dated 14.07.2015, the contractor should submit on a quarterly basis an environmental report on

Environmental Management Plan implementation. However, the company AK-AY ELEKTRIK submits the reports more often, upon completion of sections of the lines. From July to December 2017, AK-AY ELEKTRIK timely submitted 5 reports.

30. During the reporting period, monthly consultations and meetings were held with environmental specialist of AK-AY ELEKTRIK (Ms. Nazgul Asanalieva). In addition, one letter was sent to AK-AY ELEKTRIK in the reporting period regarding implementation of Environmental Management Plan. Meetings were held on a regular basis during the reporting period with AK-AY ELEKTRIK (during the reporting period there were 5 meetings).

## II. ENVIRONMENTAL MONITORING

31. According to IEE/EMP/SSEMP no instrumental measurements are foreseen for air and water quality, for noise and vibration. The following types of monitoring were used:

- noise and vibration – visual observations;
- air monitoring quality - visual observations;
- water quality - visual observations.

Results of the conducted monitoring for the reporting period are below.

### 2.1. Noise and vibration

32. Lot 1. Upgrading of Substations. No works which could produce noise or vibration were conducted.

33. Lot 2. SCADA. Mounting of opto-fiber cable. The remaining works to string fiber optic cable were conducted at a distance of more than 1 km away from settlements.

34. During the works on stringing the fiber optic cable, a slight short-term noise was generated when the equipment was delivered to electric support. The works themselves on cable stringing do not cause noise.

35. Prior to stringing the fiber optic cable, the works were carried out to prepare supports. Preparatory works consisted in rehabilitation of existing concrete supports. Rehabilitation works on supports include strengthening the walls of the soles of the support and strengthening the corners of the support itself. The old corners of supports are removed, and new corners are installed.

36. The impact from such construction works during the reporting period was insignificant, and the impact on the environment was minimal. After the works, the territory was cleaned from construction debris. The metal corners were procured and delivered to the site in off-the-shelf condition.

37. Laying underground cable. During the reporting period there were no works conducted on laying of the underground fiber optic cable. There were no works related to laying new trenches. In this regard, there was no environmental impact from implementation of this subcomponent.

### 2.2. Ambient Air Quality Monitoring

38. No dust was observed on construction sites. The vehicles were in good condition. Vehicles and machinery working at construction sites have technical passport of motor vehicle inspection as stipulated by EMP.

39. **Lot 1. Upgrading of Substations.** While replacing the equipment, a crane is used at substations for lifting equipment, also transportation of uninstalled equipment to the site, and delivery of new equipment to installation site, so these works were within the boundaries of substations. New equipment was delivered to substations in 2015, so the heavy equipment for transportation of new equipment was not used, and therefore there were no additional emissions of pollutants into the air.

40. **Lot 2. SCADA.** In accordance with EMP, machinery working on stringing of optical fiber cable under Lot 2 has technical documentation on passing technical inspection, which indicates its serviceability. Certificate of inspection of the mechanism working on construction site is shown on Photo 4.



Photo 4: Certificate of inspection of the mechanism working on construction site.

## 2.3. Water Quality monitoring

41. Lot 1. Upgrading of Substations and Lot 2. SCADA. Works were conducted at a large distance from water bodies. No spills or leakages were observed along the routes used for transportation of transformers.

## 2.4. Flora and Fauna Monitoring

42. No illegal cutting and cases of poaching were recorded for reporting period.

# III. ENVIRONMENTAL MANAGEMENT

## 3.1. Environmental management system (EMS), site-specific environmental management plan (SSEMP), work plans

43. In accordance with ADB requirements, 12 Site Specific Environmental Management and Monitoring Plans (SSEMP) have been developed for specific sites in May and June 2016.

- 1) SSEMP for Changing Oil-Filled Transformers at Substations of NEGK;
- 2) SSEMP for Changing Oil-Filled Circuit-Breakers at Substations of NEGK;
- 3) SSEMP for Changing PCB-free equipment: air, vacuum and SF6 circuit breakers, outdoor switchyards at Substations of NEGK;
- 4) SSEMP for laying fiber optic communication line (FOCL) between substations (S-S) Glavnaya – Chuiskaya 220 kV;
- 5) SSEMP for laying FOCL between S-S Kara-Balta - Glavnaya 220 kV;
- 6) SSEMP for laying FOCL between S-S Frunzenskaya – Kara-Balta 220 kV;
- 7) SSEMP for laying FOCL between S-S Ala-Archa - Frunzenskaya 220 kV;
- 8) SSEMP for laying FOCL between S-S Bystrovka – Ala-Archa 220 kV;
- 9) SSEMP for laying FOCL between S-S Glavnaya – Karagachovaya 110 kV;
- 10) SSEMP for laying FOCL between S-S Parkovaya – Ala-Archa 220 kV;
- 11) SSEMP for laying FOCL between S-S Chuiskaya – Bystrovka 220 kV;
- 12) SSEMP for laying FOCL between S-S Power and District Heating Plant (PDHP) Bishkek – Parkovaya 110kV.

44. All SSEMPs were posted on NEGK website for public disclosure in May and June 2016.

## 3.2. On-Site Inspections and Audits

45. Data on inspections and visits to the facilities for the reporting period are shown in Table 2.

**Table 2. Site Inspections for the reporting period from July to December 2017**

No.	Sites for Inspection	Who conducted inspection	Date of inspection
<b>Lot 1: Upgrading of substations</b>			
1.	Osh EHVN 1) S-S Arka 2) S-S Morskaya 3) S-S Zelinnaya	A. Asipjanov – env safeguards consultant NEGK; L. A. Kamalova, NEGK specialist	01.10.2017
2.	Osh EHVN 1) S-S Kadamjay; 2) S-S Mangyt; 3) S-S Kyzyl-Kiya	A. Asipjanov – env safeguards consultant NEGK; L. A. Kamalova, NEGK specialist	02.10.2017r.
3.	Osh EHVN 1) S-S Ozgon 2) S-S Kara-Shoro 3) S-S Uch-Dobo 4) S-S Kara-Suu	A. Asipjanov – env safeguards consultant NEGK L. A. Kamalova, NEGK specialist	03.10.2017
4.	Osh EHVN 1) S-S Sary-Tash 2) S-S Salieva	A. Asipjanov – env safeguards consultant NEGK L. A. Kamalova, NEGK specialist	04.10.2017
5.	Osh EHVN 1) S-S Zentr 2) S-S Besh-Moynok 3) S-S Tuleyken 4) S-S Tabachnaya	A. Asipjanov – env safeguards consultant NEGK L. A. Kamalova, NEGK specialist	05.10.2017
<b>Lot 2. FOCL</b>			
1.	Parkovaya – Ala-Archa, FOCL - pylons Nos.: 1- 17, 27-43;	A. Asipjanov – env safeguards consultant NEGK; N. Asanalieva – env safeguards specialist, AK-AY	08.12.2017
2.	Bishkek TPP – Parkovaya 1, 2	A. Asipjanov – env safeguards consultant NEGK N. Asanalieva – env safeguards specialist, AK-AY	08.12.2017

46. On 15 September, 2017 ADB's Country Safeguards Review mission led by Mr. Nianshan Zhang, Head of the Safeguards Unit of the Central and West Asia Department of ADB (Manila), and environmental safeguards specialists of ADB met with NEGK Management to discuss the situation with the implementation of safeguard measures at the project sites of the NEGK.

47. Ms. Phuong, Senior Environmental safeguards specialist of the CWRD of ADB noted:

- Work has begun on replacing the oil circuit breakers at the substation after the transformer oil has been tested for PCB content and it has been established that all the results showed a PCB below 50 ppm. Testing of all oil-filled equipment for PCB need to be conducted at the remaining substations of NEGK;
- A platform for temporary storage of oil-drained switches has been prepared: the platform is equipped with curbs, covered with gravel, which excludes the ingress of oil into the environment;
- Post-construction audits on Lot 2 project sites need to be completed by the end of the project.

48. *Environmental and Safety documentation on sites.* At substations there are EMP/SSEMP, logs of conducting safety briefing at the workplace, fire safety instructions, other safety logs for



those working at substations as per Health and Safety Plan of JSC NEGK and books of complaints/citizens' appeals.

49. When visiting the work sites for stringing fiber optic cable, environmental consultant of Ak-Ay company conducted instruction briefings on compliance with safety procedures. There are safety briefing logs on sites. The subcontractor's personnel performed work in PPE: helmets, working uniforms, masks, special shoes, gloves.

Photos 5 and 6. Certificate of safety briefing and work authorization of Ak-Ay company, July 2017

50. During the reporting period there were no safety incidents occurred on project sites under Lots 1 and 2.

### 3.2.1. Implementation of environmental safeguards requirements and management of oil-filled equipment, testing the oil for PCBs

51. For oil testing, the Commission was established, composed of NEGK specialists, by NEGK Order No. 229 dated 01.08.2016. Taking into account that the express analyzer prints out and stores in its memory the test results, the commission did not include specialists of SAEPP.

52. Environmental safeguards consultant and NEGK specialist started works on oil testing in October 2017. In total, 47 units of oil-filled equipment at 17 substations of Osh EHVN were tested. Testing results showed that PCBs contamination of all oil and equipment was below 50ppm. (Table 3).

53. According to obtained data, during replacement of tested equipment, SSEMP for electrical equipment and oils uncontaminated with PCBs will be implemented. The results of testing of oil-filled equipment are shown in Table 3.

54. Personnel working at collection of samples are equipped with personal protective equipment (PPE), and informed about health and labor safety requirements.

55. As mentioned in para 1.3, replacement of oil-filled equipment under Power Sector Improvement Project will be carried out at 54 substations out of 107 substations. At the remaining

44 substations oil-free equipment will be replaced with air and vacuum circuit breakers, and outdoor switchyards.

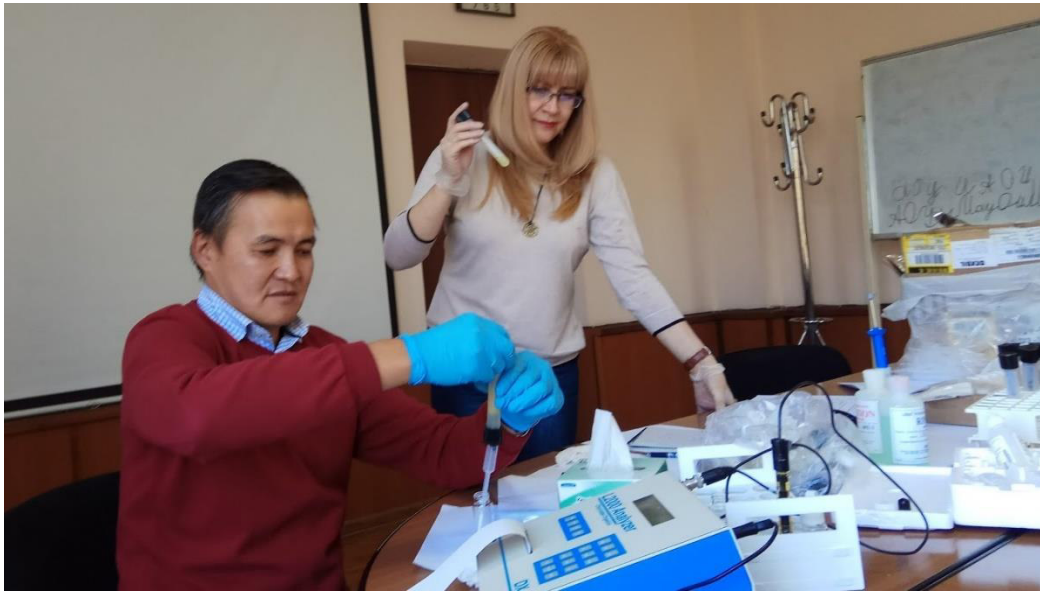


Photo 7. Oil testing from Osh EHVN current transformers for PCBs, October 2017

56. Results of testing were recorded by separate minutes for each piece of equipment and signed the test participants. Attached is the format of the minutes with a printed file on express analyzer (Appendix 2). Information on test results is posted on NEGK website specified in Public Information Section herein.

### **3.2.2. Management of SF6 Equipment**

57. In order to comply with safety requirements while replacing SF6 gas-insulated equipment, all NEGK substations have an Operation Manual for SF6 circuit breakers installation and operation. The Operation Manual (Instruction) has safety guidelines while installing SF6 gas containing equipment.



**Table 3. Results of PCBs testing of transformer oil from equipment replaced under the ADB-funded Power Sector Improvement Project at NEGK substations in July-December 2017**

No. S-S	No. of equipment	Equipment	Amount, pcs	Date of testing	Test No.	Test result, ppm	Maximum Permissible Concentration, Ppm	Note
Osh EHVN (enterprise high-voltage networks)								
1.	<b>Substation Ozgon</b>							
	1	VT 6/10kV Ph – A	1	10.10.2017	300	11.8	50	
	2.	VT 6/10kV Ph – B	1	10.10.2017	301	17.4	50	
	3.	VT 6/10kV Ph – C	1	10.10.2017	302	6.10	50	
2.	<b>Substation Kara-Suu</b>							
	4.	CT 6/10kV Ph – A	1	10.10.2017	297	23.7	50	
	5.	CT 6/10kV Ph – B	1	10.10.2017	298	24.7	50	
	6.	CT 6/10kV Ph – C	1	10.10.2017	299	48.5	50	
3.	<b>Substation Kara-Suu</b>							
	7.	VT 6/10kV Ph – A	1	10.10.2017	294	5.44	50	
	8.	VT 6/10kV Ph – B	1	10.10.2017	295	8.85	50	
	9.	VT 6/10kV Ph – C	1	10.10.2017	296	14.5	50	
4.	<b>Substation Zentr</b>							
	9.	CT 6/10kV Ph – A	1	10.10.2017	292	19.0	50	
	10.	CT 6/10kV Ph – B	1	10.10.2017	291	27.0	50	
	11.	CT 6/10kV Ph – C	1	10.10.2017	293	22.1	50	
5.	<b>Substation Zelinnaya</b>							
	12.	VT 6/10kV Ph – A	1	10.10.2017	288	13.2	50	
	13.	VT 6/10kV Ph – B	1	10.10.2017	289	8.59	50	
	14.	VT 6/10kV Ph – C	1	10.10.2017	290	38.6	50	
6.	<b>Substation Salieva</b>							
	15.	VT 6/10kV Ph – A	1	10.10.2017	285	4.84	50	
	16.	VT 6/10kV Ph – B	1	10.10.2017	286	18.5	50	
	17.	VT 6/10kV Ph – C	1	10.10.2017	287	6.50	50	
7.	<b>Substation Kadamjay</b>							
	18.	CT 6/10kV Ph – A	1	10.10.2017	282	42.2	50	
	19.	CT 6/10kV Ph – B	1	10.10.2017	283	10.8	50	
	20.	CT 6/10kV Ph – C	1	10.10.2017	284	14.7	50	
8.	<b>Substation Sary-Tash</b>							

	21.	VT 6/10kV Ph – A	1	10.10.2017	279	4.86	50	
	22.	VT 6/10kV Ph – B	1	10.10.2017	280	6.74	50	
	23.	VT 6/10kV Ph – C	1	10.10.2017	281	6.76	50	
9.	<b>Substation Morskaya</b>							
	24.	VT 6/10kV Ph – A	1	10.10.2017	267	6.03	50	
	25.	VT 6/10kV Ph – B	1	10.10.2017	268	7.59	50	
	26.	VT 6/10kV Ph – C	1	10.10.2017	269	4.17	50	
10.	<b>Substation Besh Moynok</b>							
	27.	VT 6/10kV Ph – A	1	10.10.2017	270	18.0	50	
	28.	VT 6/10kV Ph – B	1	10.10.2017	271	16.5	50	
	29.	VT 6/10kV Ph – C	1	10.10.2017	272	21.8	50	
11.	<b>Substation Kara Shoro</b>							
	30.	VT 6/10kV Ph – A	1	10.10.2017	273	18.1	50	
	31.	VT 6/10kV Ph – B	1	10.10.2017	274	4.48	50	
	32.	VT 6/10kV Ph – C	1	10.10.2017	275	21.8	50	
12.	<b>Substation Tuleyken</b>							
	33.	VT 6/10kV Ph – A	1	10.10.2017	276	13.5	50	
	34.	VT 6/10kV Ph – B	1	10.10.2017	277	6.90	50	
	35.	VT 6/10kV Ph – C	1	10.10.2017	278	5.73	50	
13.	<b>Substation Tabachnaya</b>							
	33.	VT 6/10kV Ph – A	1	10.10.2017	258	2.84	50	
	34.	VT 6/10kV Ph – B	1	10.10.2017	259	9.23	50	
	35.	VT 6/10kV Ph – C	1	10.10.2017	260	2.57	50	
14.	<b>Substation Uchar</b>							
	36.	VT 6/10kV Ph – A	1	10.10.2017	261	18.4	50	
	37.	VT 6/10kV Ph – B	1	10.10.2017	262	3.92	50	
	38.	VT 6/10kV Ph – C	1	10.10.2017	263	3.21	50	
15.	<b>Substation Mangyt</b>							
	39.	VT 6/10kV Ph – A	1	10.10.2017	264	8.07	50	
	40.	VT 6/10kV Ph – B	1	10.10.2017	265	6.39	50	
	41.	VT 6/10kV Ph – C	1	10.10.2017	266	8.69	50	
16.	<b>Substation Arka</b>							
	42.	VT 6/10kV Ph – A	1	10.10.2017	255	7.89	50	
	43.	VT 6/10kV Ph – B	1	10.10.2017	256	8.58	50	
	44.	VT 6/10kV Ph – C	1	10.10.2017	257	12.2	50	
17.	<b>Substation Uch Dobo</b>							

	45.	VT 6/10kV Ph – A	1	10.10.2017	252	11.6	50	
	46.	VT 6/10kV Ph – B	1	10.10.2017	253	6.80	50	
	47.	VT 6/10kV Ph – C	1	10.10.2017	254	5.20	50	

CT- current transformer; HVL – high-voltage line; L- line; Ph- phase voltage; VT – voltage transformer; S – Switch.

### **3.2.3. Management of Waste**

#### **Management of oils and equipment not contaminated with PCBs**

58. Taking into consideration that the tested equipment and oil, presented in Table 3, are not contaminated with PCBs, emptied oil circuit breakers and oil-filled transformers will be stored on the territory of HVNE specially equipped sites in each oblast until NEGK issues a decision on disposing them as scrap metal, or as a redundant equipment for future use.

59. After replacement, the removed tested equipment, oils drained from circuit breakers, oil-filled current and voltage transformers were transported from sub-stations to EHVNs sites in accordance with environmental requirements. No spills or leakages at transporting of equipment were observed.

### **3.2.4. Management of non-toxic waste**

#### **Lot 1. Upgrading of substations**

60. Non-toxic waste generated during construction include: construction waste, insulators, vibration dampers, unsuitable packaging, etc.

61. Construction wastes are transported from substations to sites specified in permits issued by oblast departments of environmental protection for waste disposal. Transformer oil, as it is not contaminated, it transported to EHVNs and reused after cleaning.

62. Air and oil emptied circuit breakers are sold as scrap metal for recycling. Chu EHVN concluded 2 contracts for moving-out and selling of scrap aluminum, ferrous and non-ferrous metals for recycling. (Appendix 4).

#### **Lot 2. SCADA**

63. No special camp for persons working at fiber optic fiber stringing has been arranged. The lodging for these persons are rented at nearby townships close to work sites. Municipal wastes generated at the sites during reporting period were disposed of in accordance with Chu EHVN's permit [environmental passport] for waste disposal with specification of places for storing waste (Appendix 3). AK-AY company transferred waste in the form of overhead ground-wire cable (OPGW), insulators, metal angles to Chu EHVN. Act of handover of these materials is in Appendix 5.

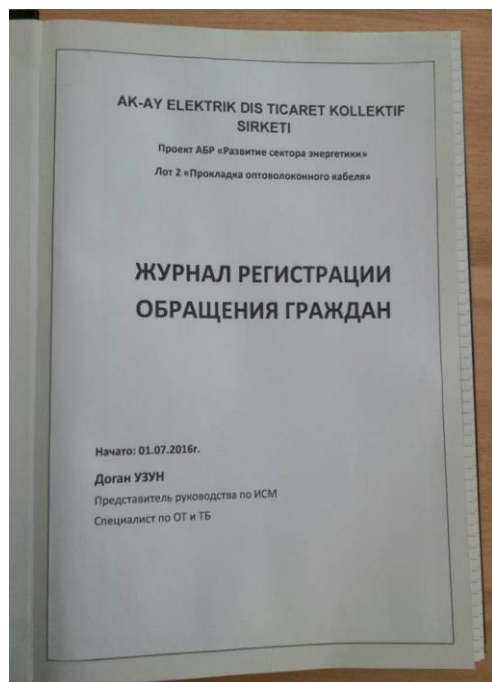
### **3.3. Non-compliance Notices**

64. No non-compliance notices were issued by ADB environment safeguards specialist during the reporting period.

### **3.4. Grievance Redress Mechanism**

65. Requirements for grievance redress mechanism of ADB Accountability Mechanism Policy (2012) and ADB Safeguard Policy Statement (SPS, 2009) on principle meet the requirements of the Law of the Kyrgyz Republic "On processing of complaints of citizens" (2007). The existing differences in timing of processing the complaints, specified as 30 days in the Law of the Kyrgyz Republic, and 14 days specified in ADB Accountability Mechanism Policy, were eliminated by the Order of the General Director of NEGK issued on May 22, 2014. The Order aims at NEGK's quick response to process the complaints.

66. The contractor working under Lot 2, Ak-Ay company, keeps register logs of citizens' grievances, at work sites. There were no complaints related to the project during the July - August 2017 period, when there were physical activities by the contractor.



ДАТА	ФИО, ТЕЛЕФОН	СОДЕРЖАНИЕ	КОМУ	ОТВЕТ
ОБРАЩЕНИЯ	ОБРАЩАЮЩИХСЯ	ОБРАЩЕНИЯ	ПОЛУЧИЛИ	ОТВЕТЫ
30.07.2017		НАЧАЛО РАБОТ 09:02		
		КОНЕЦ РАБОТ 17:53		
		ОБРАЩЕНИЙ НЕТ		
01.08.2017		НАЧАЛО РАБОТ 07:00		
		КОНЕЦ РАБОТ 16:52		
		ОБРАЩЕНИЙ НЕТ		
02.08.2017		НАЧАЛО РАБОТ 07:01		
		КОНЕЦ РАБОТ 18:58		
		ОБРАЩЕНИЙ НЕТ		
03.08.2017		НАЧАЛО РАБОТ 08:17		
		КОНЕЦ РАБОТ 19:57		
		ОБРАЩЕНИЙ НЕТ		
04.08.2017		НАЧАЛО РАБОТ 07:00		
		КОНЕЦ РАБОТ 15:00		
		ОБРАЩЕНИЙ НЕТ		
11.08.2017		НАЧАЛО РАБОТ 08:00		
		КОНЕЦ РАБОТ 13:00		
		ОБРАЩЕНИЙ НЕТ		
12.08.2017		НАЧАЛО РАБОТ 07:00		
		КОНЕЦ РАБОТ 13:00		
		ОБРАЩЕНИЙ НЕТ		
15.08.2017		НАЧАЛО РАБОТ 08:00		
		КОНЕЦ РАБОТ 15:00		
		ОБРАЩЕНИЙ НЕТ		

Photo 8 and 9. Daily register log of citizens' grievances by company Ak-Ay, status as of July 2017.

### 3.5. Information Support

67. In order to inform the public on the project implementation and measures to be taken to ensure environmental safety, NEGK continuously updates the information on project implementation progress. During the reporting period posted on the web-site the SSEMPs for two Lots.

68. The results of testing the transformer oil for October 2017 are posted on the website of NEGK ([www.neskk.kg](http://www.neskk.kg)).

### 3.6. Corrective Action Plan

69. The EMP provides for furnishing of sites that protect the soil from contamination by oil with rain water during temporary storage of oil circuit breakers and current and voltage transformers at the sites. In 2017 such site was furnished in Bystrovka substation.

70. Table 4 below specifies the progress of corrective actions fulfillment to resolve the issues noted during the Country Safeguards Review (CSR) mission by ADB on 15 September 2017 and what corrective actions must be implemented to meet fulfillment of the EMP.

**Table 4. Status of Corrective Actions Plan implementation**

#	Environmental issues identified	Corrective actions taken	Due Date	Compliance	Responsible for implementation/supervision
1.	Works on testing of transformer oil for PCB are not completed	Testing of transformer oil for PCBs	October, 2017	Testing of transformer oil at remaining substations of Osh EHVN completed	NEGK

#	Environmental issues identified	Corrective actions taken	Due Date	Compliance	Responsible for implementation/supervision
2.	A platform for temporary storage of oil-drained switches has been prepared: the platform is equipped with curbs, covered with gravel, which excludes the ingress of oil into the environment;	Prepare a platform for temporary storage of oil-drained switches, the platform is equipped with curbs, covered with gravel.	November 2017	Temporary storage sites for oil-drained switches has been prepared with curbs and covered with gravel.	NEGK
3.	Conduct post-construction environmental audit at completed sections (substations and sections of fiber-optic cable)	Conduct post-construction environmental audits on completed construction sections	July-November 2017	Post-construction audits conducted of all sections of Lot 2	NEGK

# **APPENDICES**

**Appendix 1. Minutes of Current Transformer testing for PCBs at Substation Uch Dobo, 2 phase CT, 3 copies of minutes (as an example)**

ОТКРЫТОЕ АКЦИОНЕРНОЕ ОБЩЕСТВО «НАЦИОНАЛЬНЫЕ ЭЛЕКТРИЧЕСКИЕ СЕТИ  
КЫРГЫЗСТАНА»

---

Адрес 720200 г. Бишкек, пр. Жибек-Жолу д. 326  
Тел: +996(312)66-11-52; Fax: +996(312)66-06-56; email. [nesk@elcat.kg](mailto:nesk@elcat.kg)

**ПРОТОКОЛ ТЕСТИРОВАНИЯ  
ТРАНСФОРМАТОРНОГО МАСЛА НА СОДЕРЖАНИЕ ПОЛИХЛОРИРОВАННЫХ ДИФЕНИЛОВ**

№00252 от «10» октября 2017 г.

Место проведения тестирования ПС «Уч-Добо»

Наименование оборудования ТН 6/10 кВ, Ф – А

Количество, объем образца 1 проба, 5 мг.

Наименование определяемого показателя	Ед. изм.	Результаты испытаний	ПДК по НД, не более
Полихлорированные дифенилы (ПХД)	ppm	11,6	50

Тестирование проводили:

Асипжанов А.  Нац. консультант ООС, ОАО НЭСК  
 Камалова Л.А.  ОВСИРП, ОАО НЭСК

Стр. 1 из 1

Translation:

**Open Type Joint Stock Company “National Electric Grid of Kyrgyzstan”**

Address: 720200, 326 Jibek Jolu street, Bishkek city  
 Tel.: +996(312)66-04-31; Fax: +996(312)66-06-56; email. [NEGK@elcat.kg](mailto:NEGK@elcat.kg)

**Minutes of testing transformer oil for polychlorinated biphenyls**

No. 00252

**date: “10” October 2017**

Location of testing **Substation Uch Dobo**

Title of equipment **TN 6/10 kV Phase - A**

Quantity, volume of sample **1 sample, 5 mg**

Title of indicator	Unit	Test results	MPC, not more than
<b>Polychlorinated biphenyls (PCBs)</b>	ppm	11.6	50

Testing was performed by:

Neronova T. I. National env. safeguards consultant, NEGK  
 Kamalova L. A. OVSIRP, NEGK

Page 1 of 1



ОТКРЫТОЕ АКЦИОНЕРНОЕ ОБЩЕСТВО «НАЦИОНАЛЬНЫЕ ЭЛЕКТРИЧЕСКИЕ СЕТИ  
КЫРГЫЗСТАНА»

Адрес 720200 г. Бишкек, пр. Жибек-Жолу д. 326  
Тел: +996(312)66-11-52; Fax: +996(312)66-06-56; email. [nesk@elcat.kg](mailto:nesk@elcat.kg)

ПРОТОКОЛ ТЕСТИРОВАНИЯ  
ТРАНСФОРМАТОРНОГО МАСЛА НА СОДЕРЖАНИЕ ПОЛИХЛОРИРОВАННЫХ ДИФЕНИЛОВ

№00253

от «10» октября 2017 г.

Место проведения тестирования ПС «Уч-Добо»

Наименование оборудования ТН 6/10 кВ, Ф – В

Количество, объем образца 1 проба, 5 мг.

Наименование определяемого показателя	Ед. изм.	Результаты испытаний	ПДК по НД, не более
Полихлорированные дифенилы (ПХД)	ppm	6,80	50

Тестирование проводили:

Асипжанов А.

Камалова Л.А.

Нац. консультант ООС, ОАО НЭСК

ОВСиРП, ОАО НЭСК

Стр. 1 из 1

Open Type Joint Stock Company “National Electric Grid of Kyrgyzstan”

Address: 720200, 326 Jibek Jolu street, Bishkek city  
Tel.: +996(312)66-04-31; Fax: +996(312)66-06-56; email. [NEGK@elcat.kg](mailto:NEGK@elcat.kg)

Translation:

Minutes of testing transformer oil for polychlorinated biphenyls

No. 00253

date: “10” October 2017

Location of testing Substation Uch Dobo

Title of equipment TN 6/10 kV Phase - C

Quantity, volume of sample 1 sample, 5 mg

Title of indicator	Unit	Test results	MPC, not more than
Polychlorinated biphenyls (PCBs)	ppm	6.80	50

Testing was performed by:

A. Asipjanov National env. safeguards consultant, NEGK  
Kamalova L. A. OVSIRP, NEGK

Page 1 of 1

**Appendix 2. Results of testing transformer oil stored in memory of express analyzer and printed out**

CALIBRATION: 08:39 10/10/2017  
 VERSION: 1.28  
 METHOD: 1242 OIL  
 MV = 68.7 TEMP. = 20.4C  
 A = 821.1 B = 17.691  
 OFFSET = 1.50

08:39 10/10/2017

1242 OIL

OIL

BLANK SUBTRACT: 00.0

SAMPLE ID	CHLORIDE READING	AROCLOR 1242 ANALYTE CONCENTRATION
SAMPLE #00252	3.89	11.6 PPM
SAMPLE #00253	2.27	6.80 PPM
SAMPLE #00254	1.74	5.20 PPM
SAMPLE #00255	2.64	7.89 PPM
SAMPLE #00256	2.87	8.58 PPM
SAMPLE #00257	4.09	12.2 PPM
SAMPLE #00258	.95	2.84 PPM

**Appendix 3. Permits for emissions of pollutants into ambient air and placement of waste in environment**

FROM : KDO CHUPVS

FAX NO. : 531480

Jun. 12 2017 03:51PM P2

**КЫРГЫЗСКАЯ РЕСПУБЛИКА**

<p><b>СОГЛАСОВАНО</b></p> <p>Начальник Чуй - Бишкекского территориального управления Государственного агентства охраны окружающей среды и лесного хозяйства при Правительстве КР</p> <p> <b>Кыдыргычев А.А.</b>  2017 г. М. П.</p>	<p><b>УТВЕРЖДАЮ</b></p> <p>Директор ЧУПВЭС ОАО «Национальная электрическая сеть Кыргызстана»</p> <p> <b>Ибраев Т.О.</b>  2017 г. М. П.</p>
--	---

**ЭКОЛОГИЧЕСКИЙ  
ПАСПОРТ  
ЧУПВЭС  
ОАО «Национальная  
электрическая сеть  
Кыргызстана»**  
(наименование объекта хозяйственной деятельности)

Разработан 05.04.2017г.  
дата

Срок действия экопаспорта 5 лет.

г. Бишкек - 2017 г.

КЫРГЫЗ РЕСПУБЛИКАСЫНЫН  
ӨКМӨТҮНӨ КАРАШТУУ КҮРЧАП  
ТУРГАН ЧӨЙРӨНҮ КОРГОО  
ЖАНА ТОКОЙ ЧАРБАСЫ  
МАМЛЕКЕТТИК АГЕНТТИГИ



ГОСУДАРСТВЕННОЕ АГЕНТСТВО  
ОХРАНЫ ОКРУЖАЮЩЕЙ СРЕДЫ  
И ЛЕСНОГО ХОЗЯЙСТВА  
ПРИ ПРАВИТЕЛЬСТВЕ  
КЫРГЫЗСКОЙ РЕСПУБЛИКИ

Форма № 6. ОП-16  
Утверждена приказом ГАООС и ЛХ при ПКР  
№ 82 от 25.04.2006 г.

Территориальное  
наименование структурного подразделения  
управление ООС  
индекс, адрес, телефон

**РАЗРЕШЕНИЕ № 16-0071**  
на размещение отходов в окружающую среду

Выдано НТБВС ОАО, г. Бишкек  
наименование предприятия, организации, физлиц

Орган выдавший разрешение НТУООР (экология)

Место размещения отходов терр. свалка

Срок действия до 31.12.2014 года  
дата

Номер регистрации 14 Дата выдачи 19.01.2014г.



[Signature]  
подпись

Кемденбег у.б.  
ф.и.о.

Перечень и количество отходов, разрешенных к размещению в окружающей среде,  
прилагается на \_\_\_\_\_ листах



КЫРГЫЗ РЕСПУБЛИКАСЫНЫН  
ӨКМӨТҮНӨ КАРАГАН КУРЧАП  
ТУРГАН ЧӨЙРӨНҮ КӨРҮӨ  
ЖАНА ТӨКӨЙ ЧАРБАСЫ  
МАМЛЕКЕТТИК АГЕНТТИГИ



ГОСУДАРСТВЕННОЕ АГЕНТСТВО  
ОХРАНЫ ОКРУЖАЮЩЕЙ СРЕДЫ  
И ЛЕСНОГО ХОЗЯЙСТВА  
ПРИ ПРАВИТЕЛЬСТВЕ  
КЫРГЫЗСКОЙ РЕСПУБЛИКИ

Мамал Абдыраман ТУ

наименование структурного подразделения

г. Мамал-Абдыр, д. Б. Демурба, 130

индекс, адрес, телефон

## РАЗРЕШЕНИЕ № 16 - 001673

на размещение отходов в окружающую среду

Выдано ОНО "НЭСК", Мамал-Абдырская ПВЭС

наименование предприятия, организации, предприятия

г. Мамал-Абдыр, ул. Ленина, 119

Орган выдавший разрешение Мамал-Абдырская ТУ

Место размещения отходов свалка города

Срок действия до 31.12.2014 г.

дата

Номер регистрации 41 Дата выдачи 16.01.2014 г.

Руководитель

подпись

Тришнов Б.З.

ф.и.о.

М.П.

Перечень, количество отходов, разрешенных к размещению в окружающей среде,  
прилагается на \_\_\_\_\_ листах

## Appendix 4. Contracts of ChHVENE for selling of scrap aluminum, ferrous and non-ferrous metals

Договор № 18-04/0096  
купи-продажи лом алюминия

г. Бишкек

18 04 2017 г.

Чуйское предприятие высоковольтных электрических сетей - филиал ОАО «НЭС Кыргызстана», именуемое в дальнейшем «Продавец», в лице заместителя директора Абдылдабекова Нурбек Абдылдабековича, действующего на основании доверенности от № 07/31 от 10.01.2017 года, с одной стороны, ОсОО «Швын-Фа» именуемый в дальнейшем «Покупатель», в лице директора Лемеза Вындира, действующего на основании Устава, с другой стороны, заключили настоящий договор о нижеследующем (по результатам конкурса):

### 1. Предмет Договора

1.1. В соответствии с настоящим Договором, Продавец обязуется поставить, а Покупатель принять и оплатить лом алюминия в количестве 2876,5 килограмм (далее «Товар») в соответствии с условиями настоящего Договора.

1.2. Поставщик гарантирует, что Товар находится в его собственности на законных основаниях, не продан, не заложен в споре и под запрещением (арестом) не состоит, на него отсутствуют права третьих лиц. Продавец несет ответственность за достоверность указанных сведений.

### 2. Порядок поставки

2.1. Поставка Товара по настоящему договору осуществляется на условиях самовывоза транспортом Покупателя, а Продавец обязуется обеспечить въезд (выезд) автотранспорта Покупателя до места погрузки.

2.2. Право собственности на Товар и все риски переходят от Продавца к Покупателю с момента подписания надлежаще уполномоченными представителями обеих сторон накладной на отпуск материалов на сторону. Дата оформления накладной на отпуск материалов на сторону является датой поставки Продукции и моментом перехода права собственности на Продукцию от Продавца к Покупателю. Накладная на отпуск материалов на сторону является основанием для взаиморасчетов продавца и Покупателя.

2.3. Товар по настоящему Договору поставляется навалом.

### 3. Качество Товара и порядок приемки

3.1. Приемка Товара осуществляется Покупателем по количеству - путем взвешивания на весах с последующей фиксацией данных в приемо-сдаточных актах.

### 4. Цена и порядок расчетов

4.1. Общая стоимость Товара по настоящему Договору составляет 143825,00 (сто сорок три тысяч восемьсот двадцать пять) сом. Цена за 1 килограмм 50 (пятьдесят) сом.

4.2. Расчет по настоящему договору производится Покупателем в виде предварительной оплаты в размере 100%, на основании выставленного счета.

4.3. Изменение подлежит обязательному письменному согласованию обеими сторонами посредством составления спецификации к настоящему договору не менее чем за три дня до предполагаемой поставки Товара. При не достижении согласия отгрузка не производится.

4.4. По инициативе любой из сторон составляется акт сверки и направления другой стороне, которая обязана рассмотреть его и при отсутствии возражений в течении 10-ти дней с момента получения. В ином случае она обязана составить протокол разногласий и направить его другой стороне в этот же срок.

### 5. Ответственность Сторон

5.1. В случае неисполнения или ненадлежащего исполнения обязательств по настоящему Договору стороны несут ответственность в соответствии с законодательством КР.

5.2. Все споры и разногласия, которые могут возникнуть в процессе выполнения сторонами своих обязательств по настоящему договору решаются путем переговоров и должны быть рассмотрены в течение 10 календарных дней с момента подписания стороной по настоящему Договору претензии.

5.3. При неурегулировании вопросов путем переговоров, споры, возникающие при исполнении Договора, решаются суде.

## 6. Действие Договора

7.1. Настоящий Договор вступает в силу с момента его подписания Сторонами и действует до полного исполнения обязательств по договору.

## 7. Прочие условия

8.1. Все изменения и дополнения к настоящему Договору являются его неотъемлемой частью и действительны лишь в том случае, если они совершены в письменной форме и подписаны уполномоченными представителями Сторон.

8.2. Настоящий Договор составлен в двух идентичных экземплярах, имеющих равную юридическую силу, один для Покупателя, один для Продавца.

8.3. При изменении банковских реквизитов Стороны обязаны в 5-ти дневный срок письменно уведомить друг друга. В случае не уведомления или несвоевременного уведомления, сторона, нарушившая обязательства по уведомлению, несет ответственность за возникшие в связи с этим неблагоприятные последствия.

## 8. Адреса, реквизиты и подписи Сторон

### Продавец:

ЧуПВЭС ф/л ОАО «НЭСК»  
г. Бишкек ул. Кизилбаевой, 204

ОКПО:22847694

ИНН:02512200110100

БЦФ ОАО «Оптим Банк»

р/сч:1091820100080113

БИК: 109018

РНИ УГНС по ККН 999

Телефон 53 00 84, факс 53 08 12

Абдылдабеков Н.А.



### Покупатель:

ОсОО «Швын-Фа»

Чуйская область, Биссыкатынский район, с. Люксембург, ул.

Советская, 1

ОКПО 23491167

ИНН:01604200410114

Кантский филиал ЗАО «Банк Азии»

р/сч:1118200023000159

БИК: 111008

РНИ

В. Лемеза





Договор № 26-01/0097  
купи-продажи лома черных и цветных металлов

г. Бишкек

«18» 04 2017 г.

Чуйское предприятие высоковольтных электрических сетей - филиал ОАО «НЭС Кыргызстана», именуемое в дальнейшем «Продавец» в лице заместителя директора Абдылдабекова Нурбек Абдылдабековича, действующего на основании доверенности от № 07/31 от 10.01.2017 года, с одной стороны, ОсОО «Сталь Шесть» именуемый в дальнейшем «Покупатель», в лице Ян Кичи, действующего на основании Устава, с другой стороны, заключили настоящий договор о нижеследующем (по результатам конкурса):

### 1. Предмет Договора

1.1. В соответствии с настоящим Договором, Продавец обязуется поставить, а Покупатель принять и оплатить лом черных и цветных металлов (далее «Товар») в соответствии с условиями настоящего Договора и Приложения к нему (в дальнейшем «Приложения»), являющимися неотъемлемой частью настоящего Договора.

1.2. Поставщик гарантирует, что Товар находится в его собственности на законных основаниях, не продан, не заложен в споре и под запрещением (арестом) не состоит, на него отсутствуют права третьих лиц. Продавец несет ответственность за достоверность указанных сведений.

### 2. Порядок поставки

2.1. Поставка Товара по настоящему договору осуществляется на условиях самовывоза транспортом Покупателя, а Продавец обязуется обеспечить въезд (выезд) автотранспорта Покупателя до места погрузки.

2.2. Право собственности на Товар и все риски переходят от Продавца к Покупателю с момента подписания надлежаще уполномоченными представителями обеих сторон накладной на отпуск материалов на сторону. Дата оформления накладной на отпуск материалов на сторону является датой поставки Продукции и моментом перехода права собственности на Продукцию от Продавца к Покупателю. Накладная на отпуск материалов на сторону является основанием для взаиморасчетов продавца и Покупателя.

2.3. Товар по настоящему Договору поставляется навалом.

### 3. Качество Товара и порядок приемки

3.1. При поступлении в одном транспортном средстве (вагоне, автомобиле) нескольких видов Товара, надежно разделенного между собой, приемка и оплата производится по фактическому наличию каждого вида Товара.

3.2. Приемка Товара осуществляется Покупателем по количеству - путем взвешивания на весах с последующей фиксацией данных в приемо-сдаточных актах.

### 4. Цена и порядок расчетов

4.1. Общая стоимость Товара по настоящему Договору составляет 843729,10 (восемьсот сорок три тысяч семьсот двадцать девять) сом 10 тыйын с учетом НДС, и определяется исходя из общего количества поставленного Товара в соответствии с ценой в Приложении к настоящему Договору.

4.2. Расчет по настоящему договору производится Покупателем в виде предварительной оплаты в размере 50%, на основании выставленного счета, а оставшиеся сумма по факту вывоза партиями согласно акта приема-передачи товара.

4.3. Изменение подлежит обязательному письменному согласованию обеими сторонами посредством составления спецификации к настоящему договору не менее чем за три дня до предполагаемой поставки Товара. При не достижении согласия отгрузка не производится.

4.4. По инициативе любой из сторон составляется акт сверки и направления другой стороне, которая обязана рассмотреть его и при отсутствии возражений в течении 10-ти дней с момента получения. В ином случае она обязана составить протокол разногласий и направить его другой стороне в этот же срок.

### 5. Ответственность Сторон

5.1. В случае неисполнения или ненадлежащего исполнения обязательств по настоящему Договору стороны несут ответственность в соответствии с законодательством КР.



5.2. Все споры и разногласия, которые могут возникнуть в процессе выполнения сторонами своих обязательств по настоящему договору решаются путем переговоров и должны быть рассмотрены в течение 10 календарных дней с момента подписания стороной по настоящему Договору претензии.

5.3. При неурегулировании вопросов путем переговоров, споры, возникающие при исполнении Договора, решаются суде.

## **6. Действие Договора**

7.1. Настоящий Договор вступает в силу с момента его подписания Сторонами и действует до полного исполнения обязательств по договору.

## **7. Прочие условия**

8.1. Все изменения и дополнения к настоящему Договору являются его неотъемлемой частью и действительны лишь в том случае, если они совершены в письменной форме и подписаны уполномоченными представителями Сторон.

8.2. Настоящий Договор составлен в двух идентичных экземплярах, имеющих равную юридическую силу, один для Покупателя, один для Продавца.

8.3. При изменении банковских реквизитов Стороны обязаны в 5-ти дневный срок письменно уведомить друг друга. В случае не уведомления или несвоевременного уведомления, сторона, нарушившая обязательства по уведомлению, несет ответственность за возникшие в связи с этим неблагоприятные последствия.

## **8. Адреса, реквизиты и подписи Сторон**

### **Продавец:**

ЧуПВЭС ф/л ОАО «НЭСК»  
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ОКПО:22847694

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БЦФ ОАО «Оптим Банк»

р/сч:1091820100080113

БИК: 109018

РНИ УГНС по ККН 999

Телефон 53 00 84, факс 53 08 12

Абдылдабеков Н.А.



### **Покупатель:**

ОсОО «Сталь Шесть»  
Чуйская обл., Ыссык-Атинский р-н,  
с. Милянфан, Милянфанский а/о.

ОКПО 24169494

ИНН:008055200610086

Б.Ф.Н.Б «Пакистан»

р/сч:1272000200077510

БИК: 127001

РНИ 008 Ыссык-Атинский

Ян Кичи



## Appendix 5. Act of handover of waste by AK-AY company to ChHVENE

### ACT OF ACCEPTANCE - TRANSFER

October 24, 2017

We, the undersigned, AK-AY ELEKTRİK DIŞ TIC. KOLL. ŞTİ represented by Telecommunication engineer Nursultan Asilov and ChuPVES (branch of JSC "NEGK") represented by Chief of Line Construction Nurlan Temirkulov, made this act that within the "Procurement of Plant (Design, Supply and Installation) of New Communication System Upgrade (Optic Fibre Network), SCADA Upgrade and Wholesale Metering System" project, representative of AK-AY ELEKTRİK DIŞ TIC. KOLL. ŞTİ delivered, and the representative of JSC "NEGK" accepted the following materials, which have been dismantled from 220 kV Ala-Archa – Kemin and Frunze – Ala-Archa OHLs. Dismantled materials are not suitable for use.

Nomenclature №	Product name, sort, size	Unit of measurement	Quantity	Note
1	Dismantled ground wire and dampers	kg	14440.0	---

Telecommunication Engineer



Nursultan Asilov

Chief of Line Construction



Nurlan Temirkulov

**Appendix 6. Post-construction environmental audit of completed construction works, Checklist, Substation Glavnaya**

**Checklist for environmental audit of completed construction works**

<b>Project :</b>	<b>Power Sector Improvement</b>	<b>Implementing agency</b>	JSC National Electrical Grids of Kyrgyzstan
		<b>Consultant for Supervision</b>	Asipjanov A.
<b>Участок:</b>	Lot No.2 SCADA <ul style="list-style-type: none"> <li>• stringing of OPGW along the towers of 110 kV «Bishkek TPP – Parkovaya 1,2» OHL – 11,8km</li> <li>• replacement of corners – 2,000kg</li> <li>• rehabilitation of towers' foundation - 4</li> </ul>	<b>Contractor</b>	AK - AY ELEKTRIK Company
<b>Date and time :</b>	08.12.2017	<b>Full Name and position of the specialist conducting the inspection</b>	Asanalieva N. - environmental conservation consultant

No.	Type of work	Impact	Activity(s) according to EMP	Control	Completed activities (status). notes
1.	Waste management	Waste accumulation, air and soil pollution	Collection and disposal of all waste in designated locations	Yes	Collection and removal of all wastes in accordance with Annex 1.
			Scrap metal and other wastes that will be transferred for reuse or recycling, to properly store for transfer to a specialized organization for reprocessing.	Yes	Transfer of waste for processing and use (Act of Transfer dated October 24, 2017, Annex 2)
2	Remove machinery and unsuitable equipment from the site, clean the construction site	Questions on territory improvement	Equipment and technics of the contractor to be removed in a timely manner	Yes	Carried out immediately after the completion of work
3.	Soil and water resources	Soil and water objects pollution by oil products	Carry out maintenance of vehicles/heavy equipment, as well as refueling in garages/workshops located outside the facilities	Yes	The repair of machinery was carried out outside the construction site. Petroleum products on the site were not stored, refueling of machinery was carried out off-site. There is a technical inspection of a machinery. Annex 3.
			In case of fuel on the ground, it is necessary to clean the contaminated area from oil products and to dispose the contaminated soil in the burial places of construction waste	Yes	After the demobilization of the contractor, the construction site has been cleared. There were no cases of pouring of oil products on the sites. Annex 4.

Prepared by: Asanalieva N. – environmental conservation specialist

Checked by: Asipjanov A. - Consultant for Construction Supervision